

# ANNUAL REPORTS

1947-1957


S. C. STATE COMMISSION  
OF FORESTRY



S. C. STATE COMMISSION OF FORESTRY

23





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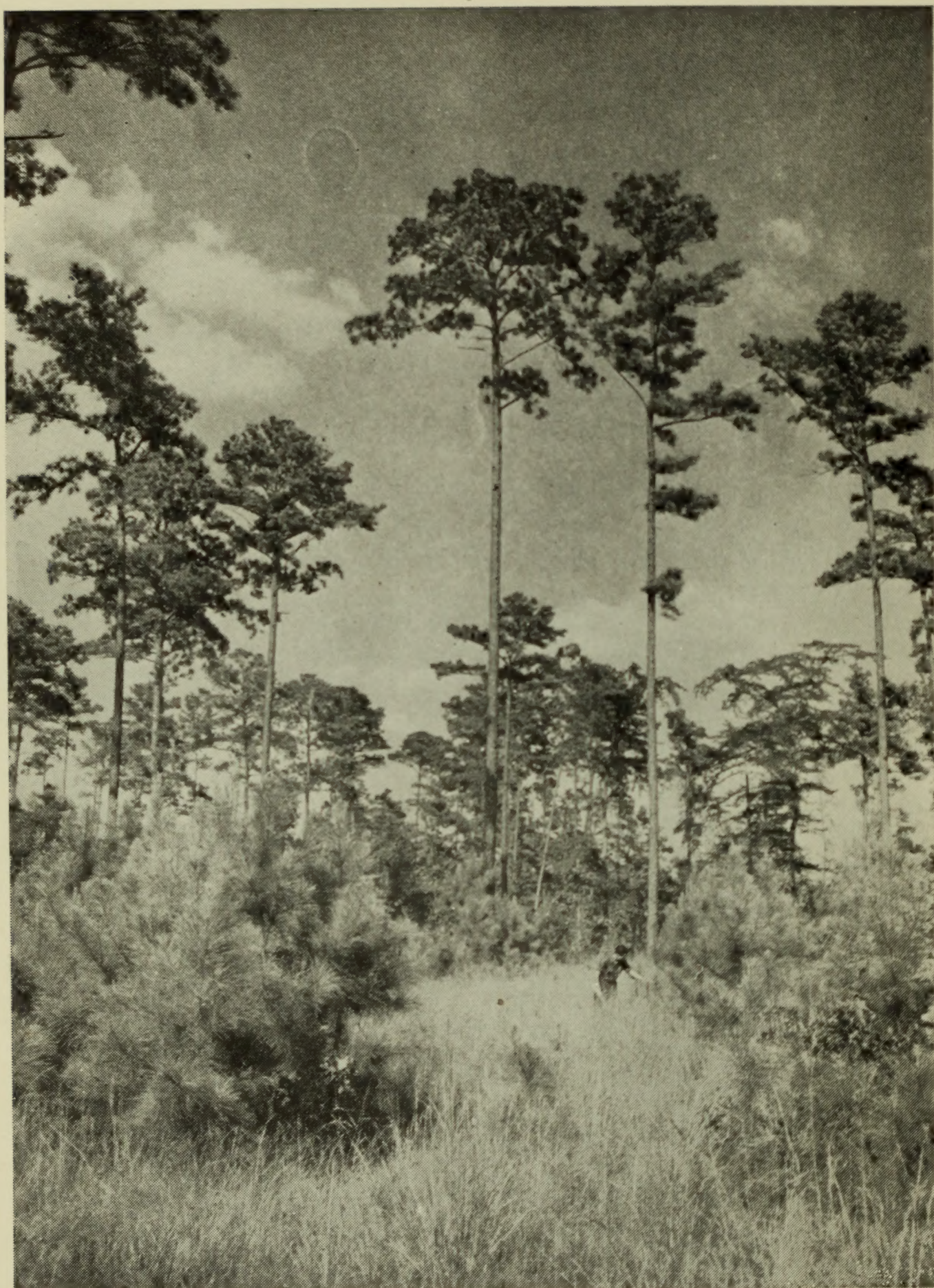












The average production of forest products per acre per year is only one-third the potential average in South Carolina. Forest fire protection and selective cutting are rapidly bringing this farm into full woodland productions.



STATE OF SOUTH CAROLINA

**REPORT**

OF THE

**STATE COMMISSION OF FORESTRY**

FOR THE YEAR

JULY 1, 1947 TO JUNE 30, 1948

CHARLES H. FLORY, State Forester



COLUMBIA, S. C.

Printed Under the Direction of the  
Joint Committee on Printing  
General Assembly of South Carolina



# TABLE OF CONTENTS

	Page
Letter of Transmittal.....	5
Personnel .....	7
Summary .....	9
Forest Fire Protection.....	23
Forest Area Protected.....	23
Forest Fire Protection Organization.....	27
Protection Personnel.....	29
Fire Protection Activities.....	30
Fire Control Training Program.....	32
Improvements .....	35
Capital Value Fire Protection Improvements.....	43
Equipment .....	43
Forest Fire Plans.....	46
Forest Fire Summary.....	47
Forest Management.....	53
Management Assistance.....	53
Reforestation .....	56
Cone Collection.....	58
Forest Survey.....	61
Farm Forestry.....	61
County and State Forests.....	61
Aiken County Forest.....	62
Cassatt State Forest.....	63
Harbison State Forest.....	63
Phelps State Forest.....	63
Poinsett State Forest.....	64
Sand Hills State Forest.....	68
Public Relations.....	73
Cooperative Forest Fire Prevention Campaign.....	73
Forestry Quiz Contest.....	75
Pulpwood Thinning Contest.....	76
Towersite Beautification Contest.....	77
Conservation Week.....	79
Motion Pictures.....	81
Vocational Agriculture School Forests.....	81
Resource Use Education.....	83
Talks .....	84
Radio .....	85
Exhibits .....	85
Southern States Public Relations Conference.....	87
Training .....	87
Publications and Posters.....	88
News Releases and Articles.....	89
Sign and Woodworking Shop.....	89
South Carolina Tree Farm System.....	90
Forestry Camp.....	91
State Parks.....	93
Operation and Maintenance.....	95
Vacation Accommodations.....	105
Appendix .....	107



## LETTER OF TRANSMITTAL

*To Honorable J. Strom Thurmond, Governor, and to the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1947 to June 30, 1948.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
B. S. Meeks, *Chairman.*





The lighthouse at historic Hunting Island State Park is a familiar landmark on South Carolina's coast.



## THE STATE COMMISSION OF FORESTRY

B. S. Meeks, Chairman, Columbia, S. C.  
 R. G. Coker, Hartsville, S. C.  
 E. W. Daniel, Greenville, S. C.  
 Guy V. Whitener, Newberry, S. C.  
 Dr. R. F. Poole, Clemson, S. C.  
 Chas. H. Flory, Secretary and State Forester, Columbia, S. C.

## DIVISION OF FORESTRY

C. H. Schaeffer, Associate State Forester, Columbia, S. C.  
 H. F. Bishop, Assistant State Forester, Management, Columbia, S. C.  
 J. C. Blakeney, Assistant State Forester, Protection, Columbia, S. C.  
 John C. Witherspoon (1), Assistant State Forester, Public Relations, Columbia, S. C.  
 D. G. Duncan (2), Administrative Assistant, Columbia, S. C.  
 E. B. Price (3), Management Assistant, Columbia, S. C.  
 Myron W. Tupper (4), Assistant Forester, Public Relations, Columbia Office.  
 G. W. Pettigrew, Management Assistant, Columbia, S. C.  
 John R. Tiller (5), Fire Control Assistant, Columbia, S. C.  
 Horace Campbell, Fire Control Assistant, Columbia, S. C.  
 John R. McLees, Fire Control Engineer, Columbia, S. C.  
 J. M. Geddings, Communications Engineer, Columbia, S. C.  
 Raymond Littlejohn, Radio Engineer, Columbia, S. C.  
 Virginia S. Holmes (6), Head, Personnel & Office Services, Columbia, S. C.  
 C. H. Nelson, Head, Fiscal and Accounting, Columbia, S. C.  
 Hugh White, Head, Property & Supply, Columbia, S. C.  
 Cole L. Page, District Forester, Aiken, S. C.  
 A. A. Lehocky, District Forester, Camden, S. C.  
 Nelson L. Peach (7), District Forester, Florence, S. C.  
 John M. Shirer, District Forester, Kingstree, S. C.  
 Fred N. Mack (8), District Forester, Newberry, S. C.  
 E. C. Pickens, District Forester, Spartanburg, S. C.  
 W. L. Hardin (9), District Forester, Walterboro, S. C.  
 E. F. Leysath (10), Director, Aiken Forest, Aiken, S. C.  
 Randolph B. Lee, Director, Sandhills State Forest, Patrick, S. C.

C. W. Nuite, Director, Poinsett State Forest, Wedgefield, S. C.  
 L. M. Staley, Nurseryman, Sumter, S. C.  
 L. M. Boice (11), Farm Forester, Aiken, S. C.

### DIVISION OF STATE PARKS

P. R. Plumer, Chief, Plans & Designs, Columbia, S. C.  
 T. D. Ravenel, Chief, Operations, Columbia, S. C.  
 C. West Jacocks, Head, Recreation, Columbia, S. C.  
 Albert Schellenberg, Head, Plans & Designs, Columbia, S. C.

- 
- (1) Replaced J. R. Tiller who was transferred to Fire Control Branch, November 1, 1947.
  - (2) Replaced E. B. Price who was transferred to Management Branch, June 1, 1947.
  - (3) Transferred to Management Branch June 1, 1947.
  - (4) Replaced Chas. E. Schreyer, Jr. who resigned March 24, 1948.
  - (5) Transferred to Fire Control Branch November 1, 1947.
  - (6) Returned to duty from leave of absence and replaced Paul F. Judson.
  - (7) Replaced J. R. Allison who resigned Nov. 15, 1947.
  - (8) Replaced John W. Clarke who resigned March 3, 1948.
  - (9) Replaced John C. Witherspoon who was transferred to Columbia Office.
  - (10) Replaced Giles G. Hall who resigned December 31, 1947.
  - (11) Replaced Wm. F. Milliken who resigned July 23, 1948.



## SUMMARY

The annual report for last year, 1946-47, summarizes the progress made by the State Commission of Forestry during a period of two decades. This year, 1947-48, marks the beginning of the third decade of service to the people of South Carolina by the Commission. Changes in personnel were fewer this year than at any other time since the beginning of the war. This means that more service to landowners in South Carolina was made possible through stability of personnel organization. District foresters in the seven district offices in the state were assisted this year by a full complement of personnel for the first time. As a result, a greater number of landowners were served than at any other time in the history of the Commission. This was also only the second year of operation of a full state-wide forest fire control organization. This year reflected the experience gained by county personnel, particularly those who came on duty with the creation of the state-wide fire control organization on July 1, 1946. Partly because of heavy winter rains during the greater part of the fire season and partly because of increased efficiency of operation the new record was established in holding forest fire loss to a minimum. This break in weather conditions enabled county personnel to make great strides in completing permanent improvements and in building up good will among landowners. It was also the second year of operation of the Wedgefield Forest Tree Nursery in Sumter County. During this year more than eleven and a quarter million trees were produced and planted by landowners in South Carolina.

A greater number of people visited the state parks this year than at any other time in the history of the Commission. Visitors totaled some one and one-half million people. Initial work was begun on a new state park near Spartanburg on the old Camp Croft property.

Summary statements of progress made during the past year within each of the several branches of forestry and parks follow.

### **Forest Fire Protection:**

For the second year assistance in forest fire protection was furnished to all woodland owners of the state by the Commission of Forestry. This development was the outgrowth of years of effort on the part of interested landowners and the Forestry





Private citizens help protection forces. Equipment is needed to prevent the destruction caused by forest fires.



Commission to gradually expand forest fire protection. In the beginning the Commission cooperated with small groups of woodland owners in organizing forest protective associations. Some associations provided for the organization of fire crews under the jurisdiction of the Commission. In other instances the Commission developed a detection and reporting service for landowners who organized their own fire suppression crews. Later individual counties appropriated funds for matching state and federal funds to provide organized protection to the woodland area of the entire county. Prior to the State-wide Forest Fire Control Act, passed by the 1945 legislature, twenty-four counties had been organized on their own initiative. With the passage of this act forest fire control was extended to all woodlands in the state beginning July 1, 1946. During the first year of state-wide operation emphasis was placed in the new counties on appointing, training and equipping of all personnel engaged in forest fire protection work in the twenty-two new counties. During the year covered by this report further training was stressed. Since weather conditions were responsible for a year of relatively low fire hazard it was possible to make significant progress in on-the-job training, in constructing permanent improvements, and in strengthening educational and contact work among landowners.

Of immediate concern is the apparent leveling-off of federal allotments for fire protection work in South Carolina. It is evident that under the existing formula for determining federal funds available to this state, unless the expenditure of state funds can be maintained or increased from year to year, the total funds allotted by the federal government will be gradually reduced.

The demand for services such as the firebreak plowing service for landowners continues to increase over previous years. However, because of lack of funds for operation the number of tractor plow units was reduced from six to four. The nominal charge made to landowners hardly covered half the actual cost of operation. In spite of reducing the number of units, more than 1,300 miles of new firebreaks were plowed and nearly 850 miles of old breaks reopened with the firebreak maintenance equipment.

Fire protection improvement accomplishments for the year included the construction of nine tower dwellings at new tower sites, one lookout tower and 61 miles of telephone lines. Salvage of old line totalled 81 miles and re-location more than 36 miles.

As commercial circuits are expanded, the Commission plans to utilize this service to eliminate the maintenance of its own system which now totals 2,348 miles.

Radio communication facilities of the Commission were expanded with the installation of twenty new two-way sets. Thus, a total of some forty-six units are in operation in twenty-three counties, lending much to the more efficient operation of the fire protection organizations. All counties should be completely equipped in the near future.

Experimental work in fire control equipment continued on a modest but effective scale. The most significant accomplishment was the development of a new light plow for fire suppression work.

An outstanding improvement in operations was effected by the development of detailed county fire plans. A total of twenty-three plans were completed this year in addition to substantial progress made in developing them for the remaining twenty-three counties. These fire plans will result in greater efficiency of operation of the fire control organization.

Inspection of all phases of fire control work was expanded during the year to include all county units. Such a system is vital to the continued efficient operation of these units.

### **Forest Management:**

The demand for and production of all forest products in South Carolina continues at a high level, and studies made by the U. S. Forest Service indicate that this situation will remain unchanged for four or five years. Since drain on sawtimber has exceeded growth, South Carolina must take the necessary steps to build up sawtimber growing stock and increase the productivity of all forest land.

Demands for forest management assistance from landowners increased to the extent that existing personnel could not take care of all requests received. Upon request, a forester of the State Commission of Forestry will examine any area and give recommendations as to proper forestry practices, including cutting, reforestation and fire protection. If there is sufficient timber in need of cutting, the forester will mark each tree that should be cut, provide the landowner with an estimate of the number of board feet or other products marked and assist in





Foresters of the Commission have marked timber for selective cutting on this Marlboro county farm several times during the past ten years. This service needs to be greatly expanded to achieve full woodland production in South Carolina.

making the sale. There is a small charge for the marking service only. During the year nearly 150,000 acres of woodland in 545 different tracts were examined. Nearly 20,000,000 board feet of sawtimber and over 3,000 standard cords of pulpwood were selectively marked for more than 200 landowners.

The nursery at Wedgefield, S. C. distributed a total of 11,457,490 seedlings throughout the state. Although this is a large number of seedlings, only a small portion of the state's one and one-half million acres of non-productive forest land could be planted with them. It is expected that the seedling production for the planting season of 1948-49 will exceed 25,000,000 seedlings, thereby bringing more of the non-productive acreage back into use. The General Assembly again made it possible for any landowner in the state to receive up to 5,000 seedlings free of charge if picked up at the nursery or at fifty cents per thousand delivered to his nearest express office.

Six state forests, comprising 133,241 acres, are now administered by the State Commission of Forestry. Work on manage-



ment plans, started in 1946-47, progressed satisfactorily and preliminary work was completed on Poinsett State Forest; also about one-half of the preliminary work was completed on the Sand Hills State Forest.

Silvicultural practices and research on the state forests included release cuttings, pruning, fertilizing, poisoning scrub oaks, direct seeding, prescribed burning and clearing scrub oak areas followed by tree planting.

Prior to acquisition, almost all of the land in state forests was heavily cut over, badly burned and generally misused. For these reasons it will take a number of years to rebuild these areas to a productive condition.

### **Public Relations:**

In addition to many other duties, all personnel of the Commission have always welcomed the opportunity to make talks and present programs on forest conservation to anyone or any group requesting this service.

The Commission's public relations branch is responsible for developing this service. Information on forestry and education of both school and adult groups on forest conservation must be expanded to develop the full potential of our forest resources.

It is everyone's responsibility to prevent forest fires.

It is the landowner's responsibility to regulate the cutting of timber. Industry must encourage wise cutting. It is also the owner's responsibility to put his idle land back to work by planting trees.

Every citizen in South Carolina gains when these responsibilities are discharged!

Forest fires still burn some 200,000 acres in the state per year on the average.

Advance information on the most recent survey shows that timber in South Carolina is still being cut faster than it is growing. Low grade and commercially worthless trees are gaining the upper hand.

More than one and one-half million acres of land remain to be planted to trees to restore it to productivity.

A \$60,000,000 industry in South Carolina, recreational opportunities, the preservation of soil and water supplies, and the well-being of every citizen are at stake.



Reliable surveys have shown that not only is it possible to maintain these assets to the state, but, further, it is possible to increase them at least three-fold!

This year, 1947-48, the branch of public relations made significant progress in educating the people in these problems and solutions.

The fire prevention campaign involved the distribution of some 900,000 pieces of literature. In addition, more than 1,000,000 pieces of literature on other forestry subjects were distributed.

Forestry quiz contests were held in some 1,900 schools before audiences of more than 150,000 students and teachers.

More than 1,000 groups participated in Conservation Week activities which were attended by nearly 83,000 people.

Forestry motion pictures were shown to more than 600 groups with a combined attendance of more than 42,000 people.

More than 2,500 talks were made to a combined audience of nearly 150,000 people.



District foresters work closely with teachers of vocational agriculture on the development of school forests where future farmers become prepared for the proper management and protection of their woodlands.



Exhibits were placed in twenty-two county fairs in addition to the state fair in Columbia for white and colored.

School forests were operated by the Division of Vocational Agriculture in thirty-nine schools. District foresters worked closely with the teacher in providing his students with this out-of-door classroom and laboratory in forestry.

Publications, signs, the 5-acre Pulpwood Thinning Contest, radio programs and a total of 786 news releases fitted into the educational program of the Commission.

Existing personnel and facilities are not sufficient to comply with all requests for educational service. This field of the Commission's activities must be substantially strengthened if the known solutions to forest conservation problems are to be put into practice on the land.

### **State Parks:**

Unprecedented use of South Carolina's state parks and waysides characterized this year's operation of the system. More than 1,500,000 people used the parks this year as contrasted with last year's record-breaking attendance of 1,241,000.

Heavy use has resulted in additional responsibility of personnel in maintaining the cleanliness and beauty that have made South Carolina one of the leading states in the nation in providing wholesome out-of-door recreation for its citizens.

A significant development during the year was the completion of the \$120,000 maintenance and repair program.

Pavement of roads at Cheraw, Sesqui-Centennial, and surfacing of the access road to Poinsett greatly improved the accessibility of these parks.

Relieving to some extent the demand for over-night facilities at Myrtle Beach, twenty trailer vacation cabins were added to supplement the permanent type cabins. However, requests continued to exceed available facilities.

Construction of the bathhouse, beach, water system, picnic tables and latrines was initiated on the park for colored at Poinsett and is now complete.

Electric stoves and refrigerators were purchased and installed at Oconee State Park's twenty cabins and at five cabins at Givhans Ferry.





Proper maintenance of facilities and development of the beauty of each park must be provided for and expanded to meet the unprecedented demand.

Other construction completed includes the bathhouse at Spartanburg State Park, three cabins at Table Rock, and a new picnic shelter at Sesqui-Centennial.

Existing facilities must be expanded and additional state parks must be established to serve all sections and people in South Carolina.

#### **Personnel:**

Changes in personnel, although frequent, were not as numerous as during the war years and immediately thereafter. In the main, most changes were occasioned by transfers or promotions among existing personnel and in a few instances with new appointments to fill vacancies. As is to be expected, each year industry attracts some of our men with offers that cannot be met by the Commission. Therefore, a continuous program of training is in progress to help withstand some of our personnel losses.



Following the transfer of Mr. John R. Tiller to the position of Fire Control Assistant, Branch of Fire Control, Mr. John C. Witherspoon was promoted from District Forester, Walterboro, to Asst. State Forester, Public Relations, Columbia.

Mr. E. B. Price was transferred from the position of Administrative Assistant to Management Assistant and was replaced by Mr. D. G. Duncan, a former employee of the Commission.

Mr. Nelson L. Peach, former Technician, Newberry District, was promoted to District Forester, Florence District, replacing Mr. John R. Allison, who resigned November 15, 1947 to enter industrial employment.

Mr. Fred N. Mack, Technician, Columbia, was promoted to District Forester, Newberry District, following the resignation of Mr. John W. Clarke March 3, 1948 to enter private business.

Mr. W. L. Hardin, a former employee of the Commission, was re-employed as District Forester, Walterboro, following Mr. Witherspoon's transfer to Columbia.

Mr. E. F. Leysath, Asst. Dist. Forester, Kingstree District, was transferred to the position of Director, Aiken Forest, following the resignation of Giles G. Hall on December 31, 1947.

Mr. Myron W. Tupper was appointed Technician, Columbia Office, following the resignation of Charles E. Schreyer, Jr., on March 24, 1948.

Mrs. Virginia S. Holmes returned to duty from leave of absence and was appointed Head, Personnel and Office Services, replacing Mr. Paul F. Judson, who resigned on November 18, 1947.

Many other personnel changes occurred among other technical and non-technical personnel in district offices, in the state parks, and unit fire control organizations.

### **Recommendations:**

The achievement of state-wide forest fire control is a monument to the vision of the General Assembly. This development resulted in the establishment of the basic frame-work needed for adequate protection.

However, it alone will not provide South Carolina with adequate protection. A tentative standard by which this is judged is that fire losses must be held to one-half of one percent of the total forest area for any five-year period. At present the average loss is more than one and one-half percent.



Cost estimates used by the federal government as a basis for the allotment of funds to South Carolina are prepared only once every five years. Present estimates were prepared four years ago. This cost figure is 9.3 cents per acre. Since that time actual costs have increased by at least twenty-five percent. Today the actual cost of providing adequate protection is 11.0 cents per acre.

South Carolina has reached its peak in the allotment of federal funds. There is every indication that these funds may be seriously reduced as other states qualify for more funds by virtue of allotments being contingent upon the increase in state appropriation. Unless more federal money is appropriated, the increase to other states will be made at the expense of South Carolina forest fire protection.

Reducing forest fire losses in the state to one-half of one percent can only be accomplished by an increase in state appropriation to offset loss of federal funds and to meet rising costs of operation.

Immediate needs to intensify protection of forests from fire are: Salaries of county personnel must be raised for effective work; the use of heavy mechanical fire fighting equipment must be expanded and provision made for replacement and maintenance of other equipment; two-way short wave radio communication facilities must be extended to all counties in the state; educational activities regarding fire prevention and the landowners' responsibility of actively assisting the regular suppression organization must be strengthened.

Raw material requirements for some 1,600 primary wood-using industries in the state are increasing. There is every indication that additional industries of this type will look to South Carolina for location.

Advance information from the most recent survey of existing timber stock shows that over-cutting is more serious than previous surveys have indicated.

These forests are of real concern to everyone in South Carolina. The final responsibility for proper sale of forest products rests with the landowner. He must protect his own interests just as buyers of timber protect theirs.

It is the function and responsibility of the Commission of Forestry to educate and advise landowners in order to prevent over-cutting and to rebuild our forest growing stock.



Forest management assistance to private timberland owners by the Commission must be greatly expanded. Existing personnel are not sufficient to comply with all requests for service. At present there is one man to about three counties on the average. This number should be expanded to have at least one man for every two counties, and in many sections of the state there should be one trained forester for each county.

This year foresters of the Commission marked for selective cutting some twenty million board feet of sawtimber and 3,000 cords of pulpwood. For the number of personnel involved this is a good record, but this marked timber was only two percent of the annual cut in the state of one billion feet.

It is recommended that a minimum of four additional trained foresters be placed in the field to intensify this service.

Further intensification of the educational program of the Commission is needed to convince the people of the state that only by conservative cutting can the full productivity of our timberlands be realized. This system of selective cutting provides for the greatest possible production of wood products per acre over the longest period of time. Proper cutting of growing stock returns the greatest interest on land and timber investments.

At least one and one-half million acres of idle, abandoned, cut-over, and burned-over land must be planted to forest tree seedlings if this land is to be returned to production. The reforestation program must be intensified and land-owners educated to its need if this worthwhile job is to be done within a reasonable length of time. Estimates of planting stock for the fiscal year 1948-49 indicate that 25,000,000 trees will be available. This supply will plant 25,000 acres. At this rate it will take sixty years to complete the job, the length of time necessary to grow a crop of timber.

The production of forest tree seedlings is now nearly self-supporting. It would be fully self-supporting but for the provision for free seedlings.

The entire program of forest fire protection, assistance to private landowners in woodland management, and planting seedlings can succeed only by a strong program of education. It is recognized that both adult and school-age groups must be currently informed on the need for forest conservation and on activities that they can support.



In addition to the Commission's recognition of the responsibility of educating our citizens with the resulting self-imposed work-load, there are many other groups throughout the state that call for assistance in their efforts to develop concern about forest conservation. Existing personnel and facilities are not sufficient to comply with all requests for educational service. It is paramount to the success of the entire forest conservation program that every advantage be taken of all opportunities for service and of every possibility of developing additional opportunities.

Specifically, audio-visual aids present far reaching avenues of sound approach; expansion of informational literature must be implemented; full advantage must be taken of the receptive attitude and genuine interest of radio and the press. There is an acute need for preparing materials from samples of the good work being done in South Carolina for South Carolinians.

The development of the state park system has contributed widely to the cause of conservation. A state park as an out-of-door classroom for group campers and for many other children attending organized day camps is an important factor in developing conservation minded citizens. The system provided wholesome recreational opportunities for one and one-half million people last year. Maintenance of facilities and efficient operation of existing state parks must of course be continued. Many of the established state parks lack adequate facilities to meet the ever-increasing demands made by the public.

At least two areas in the state are not adequately served by state parks. Furthermore, state park facilities for colored should be established in at least three of the more densely populated areas of the state.





During an average year 6,000 uncontrolled forest fires damage or destroy some 200,000 acres of woodland. These fires must be prevented if South Carolina's woodlands are to reach maximum production.





## FOREST FIRE PROTECTION

Assistance in forest fire protection is furnished to all woodland owners of the State by the Commission of Forestry. The federal government cooperates with the State in forest fire protection work by giving financial assistance as authorized by Section 2 of the Clarke-McNary Law (1924).

Initially, the Commission cooperated with groups of woodland owners organized in forest protective associations in connection with fire protection work. Later, individual counties appropriated funds for matching state and federal funds to provide protection to all woodland areas of the county. Eventually, 24 counties were so organized.

Organized fire protection for all counties of the State was authorized by legislative action during the 1945 Session of the South Carolina General Assembly. Since that date, all effort has been directed toward unit organization and the construction of fire protection facilities such as lookout towers, towermen's dwellings and connecting telephone lines with regular organization personnel. This program of protection facilities has been completed except for a number of tower dwelling units. Fire fighting equipment such as hand tools, trucks and tractor plow units has been purchased. Frequency modulation, two-way radio installation in motorized equipment and towers has been initiated. A complete organization consisting of ranger, wardens and towermen has been set up in each county. Tractor operators have been employed for operation of tractor plow suppression units.

Both group and "in place" training is being given continuously to all personnel in the various phases of the job. Each organization has had the benefit of at least two years actual experience in forest fire prevention and suppression work. There still remains, however, much to be accomplished in providing for a continuous, efficient performance by each individual unit.

The following pages give a description of the Commission's fire protection organization and a summary of its activities and accomplishments during fiscal year 1947-48.

### FOREST AREA PROTECTED

The total area of state and private forest lands receiving organized fire protection amounts to 11,542,170 acres. A total of



154,882 acres of forest land in State Parks and State Forests are included in this figure, the remaining area of woodland being entirely privately owned.

The area of forest land under state-wide fire protection does not include 580,805 acres within national forest boundaries and protected by the U. S. Forest Service. These areas are listed below by forest and county.

## S. C. NATIONAL FOREST AREAS PROTECTED

### Sumter National Forest

#### Enoree Division :

Chester .....	11,777
Fairfield .....	12,343
Laurens .....	20,265
Newberry .....	54,879
Union .....	53,682

Total Enoree Division .....	152,946
-----------------------------	---------

#### Long Cane Division :

Abbeville .....	20,976
Edgefield .....	28,359
Greenwood .....	10,387
McCormick .....	47,460
Saluda .....	4,244

Total Long Cane Division .....	111,426
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#### General Pickens Division :

Oconee .....	70,995
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Total General Pickens Division .....	70,995
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Total Sumter National Forest .....	335,367
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### Francis Marion National Forest

Berkeley .....	186,859
Charleston .....	58,579

Total Francis Marion National Forest .....	245,438
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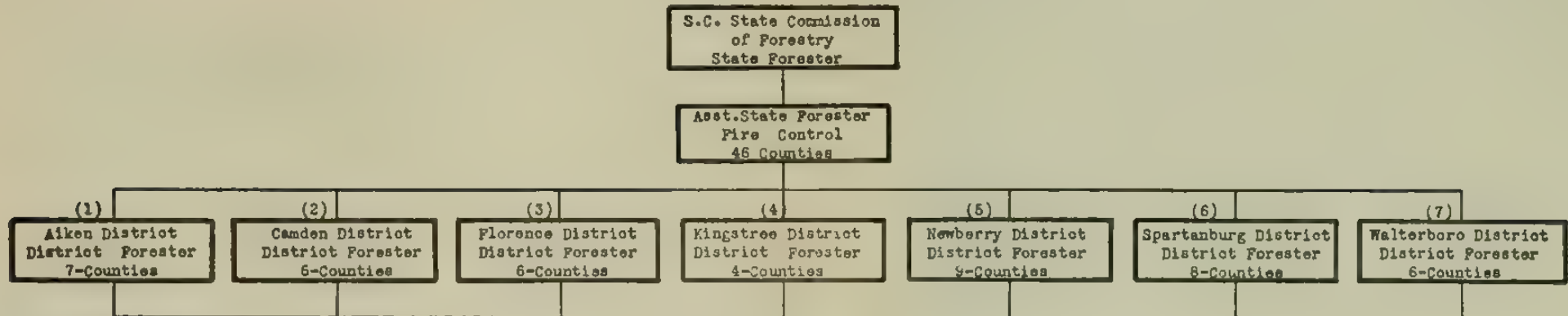
Total S. C. National Forest .....	580,805
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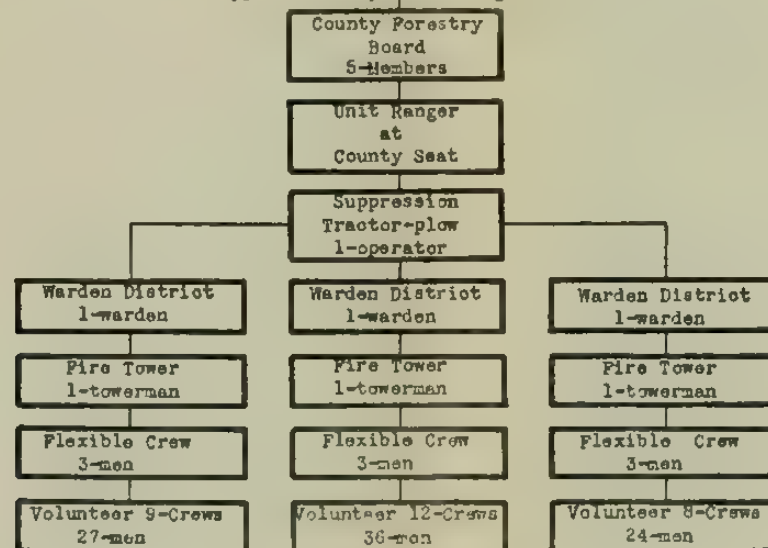




**STATE-WIDE FIRE PROTECTION ORGANIZATION CHART**  
Fiscal Year 1947-1948



**Typical County Unit Organization**





## FOREST FIRE PROTECTION ORGANIZATION

All fire protection work is conducted on a cooperative basis with the landowner. Although given assistance by the Commission, the landowner is in no way relieved of the responsibility for fires on his property. Neither is he relieved of his responsibility of rendering assistance in the way of manpower and equipment under his control for suppressing fires that may occur on his property.

The fire protection job as performed by the Commission includes assistance to forest landowners in detection and reporting of fires on or near their property and cooperative assistance in the suppression of all uncontrolled woods fires. A comprehensive fire prevention program, an important adjunct to successful fire protection aimed at the reduction of man-caused fires, is conducted as a part of the regular fire protection job.

For administrative purposes, the State is divided into seven forest districts. All forestry work in each district, including fire protection, is under the direct supervision of a District Forester.



The landowner is not relieved of his responsibility of rendering assistance in the way of manpower and equipment under his control for suppressing fires that may occur on his property.



### **County Units:**

Within each county, there is set up an organization to handle the fire protection job. This organization is headed up by a ranger who is assisted by from one to five wardens, depending on the size of the county and the amount of forest land, plus the fire hazard existent within the county. Their work is concerned primarily with the prevention and suppression of forest fires. A similar number of towermen are employed who man lookout towers strategically located within each county for the purpose of detecting, locating and reporting forest fires. All unit personnel are connected by telephone with the towers in their county.

In the sandhills and lower coastal counties where fire hazard is greater, one or two tractor operators per county are employed on a part-time basis for operating light fire suppression units, consisting of a tractor and plow.

With the assistance of his wardens, each ranger organizes a number of volunteer fire crews in each community of the county. The men who comprise these crews assist in the prevention and suppression of fires in their locality. Fire fighting hand tools are distributed to these volunteers for their use. During high fire hazard days, each ranger may employ several men who are organized into flexible crews to assist regular personnel in fire suppression. Their employment is only temporary, depending on fire hazard conditions. County units cooperate closely in the matter of reporting and suppressing fires adjacent to county lines.

In addition to the field forces in each county unit, there are set up county forestry boards consisting of five citizens of the county interested in the advancement of forestry. This board serves in an advisory capacity to the Commission and assists in guiding the fire protection program within the county. Figure 1 of this report shows a chart of the present State fire protection organization together with a typical county unit organization.

### **State Forests and Parks:**

All State Forests and Parks receive cooperative assistance in fire protection through the local county unit organization. Forces maintained on the forests and parks, however, are responsible as are private landowners for protecting their areas and for rendering all assistance possible in the prevention and suppression of



forest fires that may occur on or adjacent to their respective forest or park.

The combined forest acreage of all State Forests and Parks so protected from fire amounts to 154,882 acres.

### **National Forest Protection:**

The U. S. Forest Service provides fire protection with its own forces and equipment for the 580,805 acres of national forest land in the State, included in two national forests. These forests are located as follows: Francis Marion National Forest in the lower coastal plain and the Sumter National Forest in the piedmont and mountains.

### **Cooperative Agreements:**

In order that fire protection work may be coordinated on national forest and private forest lands, cooperative agreements have been drawn up and put into effect by the U. S. Forest Service and the State Commission of Forestry. These agreements place responsibility for protection of the forest lands on the agency having the greater forest protection area in the immediate vicinity of the property in question. Definite protection boundaries of each agency have been established.

## **PROTECTION PERSONNEL**

No material change over that of the previous year was made in the number of persons employed in connection with fire protection work. There was, however, in some counties, considerable turnover in the various positions below the ranger level. This was mainly attributed to the Commission's inability to provide salaries commensurate with increased costs of living. All county units, however, were kept completely organized throughout the year, replacements being made shortly after vacancies occurred.

A total of 799 persons were employed in fire prevention and suppression work, either part or full-time during the year. This number includes 46 unit rangers, 1 assistant ranger, 129 wardens, 134 towermen, 35 tractor operators and 456 men employed in retainer and flexible crews.



In addition, a total of 2,818 persons were organized in volunteer fire crews. A total of 2,446 persons gave assistance to the regular county unit forces in fighting forest fires in their respective communities. In all, 5,954 persons were engaged one way or another in forest protection work with the Commission of Forestry during the year.

## **FIRE PROTECTION ACTIVITIES**

### **Training:**

The training of fire protection forces received major emphasis throughout the year. It is recognized that this phase of the protection program must be given constant attention in order to maintain the efficiency of all personnel. Training began with protection personnel of the Columbia Office and was extended into the districts and county units. A state training meeting for Columbia and district office personnel and county unit rangers was held in August at Cheraw State Park. This was followed by district training meetings in each district for unit rangers, wardens, towermen and tractor operators. Volunteer crew training meetings were then held in each county. Further, training was given to tractor operators. Weekly meetings were held by the rangers and wardens in each county. In all, a total of 2,332 meetings were held in the State where training and instruction were given in forest fire protection work.

The table below shows a summary of training meetings held by type, location, period and attendance.





**Alert personnel, good equipment, and adequate communications facilities are required for efficient service to our landowners.**

## FIRE CONTROL TRAINING PROGRAM

### Training Meetings

<u>Type</u>	<u>Location and Period</u>	<u>In Attendance</u>
State Fire Control	Cheraw State Park (4 days)	Central & District Office personnel, county unit rangers
State Administrative	Hartsville (1 day)	Central & District Office personnel
State Tractor Project	Burnt Gin (1 day)	Central & District Office personnel, crawler tractor operators
District Fire Control	Each District (1 day)	Central & District Office personnel, unit rangers, wardens, towermen, tractor operators
District Tractor Operator	5 Districts (1 day)	Central & District Office personnel, tractor operators, unit rangers
County Volunteer Crews	Each County (4 hrs.)	Volunteer Crews, unit rangers, wardens, towermen, District & Columbia Office personnel
County Fire Control	Each Ranger's Office (1-4 hrs. Every week)	Unit ranger, wardens

Minor alterations and additions were made to the Fire Control Manual. This manual is used as a reference in the performance of training and other fire protection activities.

### Inspection:

Periodic inspections of county unit organization and operation were made both by personnel of the district and Columbia offices. These inspections are made to determine the overall condition of the fire control unit as to efficiency of operation, personnel efficiency, condition of fire protection facilities and to determine



those things needed to bring the unit up to standards of operation as prescribed by the Commission.

A report of each inspection is prepared in detail with recommendations and is then transmitted to the field for guidance in correcting deficiencies noted.

In addition to the regular district inspection of county units, a total of 12 inspections were made by Columbia Office personnel as follows: Barnwell, Berkeley, Chester, Clarendon, Darlington, Dorchester, Georgetown, Horry, Jasper, Marlboro, Orangeburg and Richland.

Regular inspections are made of all motorized equipment by traveling mechanics to insure that this equipment is kept in good operating condition and ready for immediate use in case of a fire call.

A preparedness check list was used by the district foresters to determine the extent each unit was prepared for the fire season. This list proved very beneficial in planning for further organization improvement.

#### **Fire Plans:**

Work was initiated in the preparation of a detailed fire plan for each county fire protection unit, these plans to be used as a guide for handling fire suppression activities and for training personnel as to their action in the event of fire and during hazardous fire weather. A total of 23 unit fire plans have been completed and put into use. The remaining plans are about 50% complete.

#### **"Show Me" Trips:**

As an aid to familiarizing county unit forestry board members with their fire protection organization and its various protection activities, "Show Me" trips were held in 30 of the 46 counties. These trips were well attended by the board members and proved to be of much benefit to them. It is planned that additional "Show Me" trips be held during the coming year.

#### **Fire Protection Job Descriptions and Qualifications:**

During the year, job descriptions and minimum qualifications for the various fire protection positions in the Columbia and district offices and for the county units were prepared.





District foresters conducted county forestry board members on "show me" trips in 30 of the 46 counties. They attended demonstrations of all fire protection activities in each county and also studied some of the forest management assistance to private landowners and reforestation activities. In the above photo the Marlboro County Forestry Board studies the fire danger station.

The use of these personnel standards will go far toward insuring the employment of the highest qualified persons available and will assist in maintaining continued personnel efficiency.

#### **Law Enforcement:**

All fires are investigated in an effort to determine the person or persons responsible. Where sufficient evidence is secured, law enforcement is carried out. This is one of the best means of reducing the number of willful and careless fires which occur each year. Records show that where enforcement work is conducted, there is a corresponding reduction in the number of fires.

Although considerable work was done in this activity, more enforcement of State forest fire laws is needed. Continued cooperation of local magistrates is essential to a successful law enforcement program. Records for the fiscal year show that there were 196 persons prosecuted for setting fires. Of this number, 189



were convicted. Florence District had the best law enforcement record with 73 prosecutions and 70 convictions. Horry county unit led the state with 32 prosecutions and 30 convictions. Hampton, Florence and Marion counties also had good law enforcement records.

### **Burning Permit Law:**

Three counties, Greenville, Orangeburg and Aiken, have a law which requires that permits be secured by persons who plan to burn brush, fields and ditchbanks adjacent to woodland areas between the dates of October 15 and May 15 of each year. These permits are issued by the local county unit organization and certain other designated persons. When permits are issued, the ranger or authorized representatives issue instructions regarding the use of care in burning. The unit ranger may refuse to issue permits if the fire hazard warrants such action.

A total of 3184 permits were issued during the year in the above-named counties. Of these permit fires, none escaped; however, 13 persons were prosecuted for burning without a permit. A more careful attitude toward the use of fire is evident in these counties as a result of the burning permit law. In addition, much time and needless fire investigation work is avoided on the part of the unit organization where burning permits are issued.

It is believed that a state-wide burning permit law is needed to assist in reducing the number of man-caused fires.

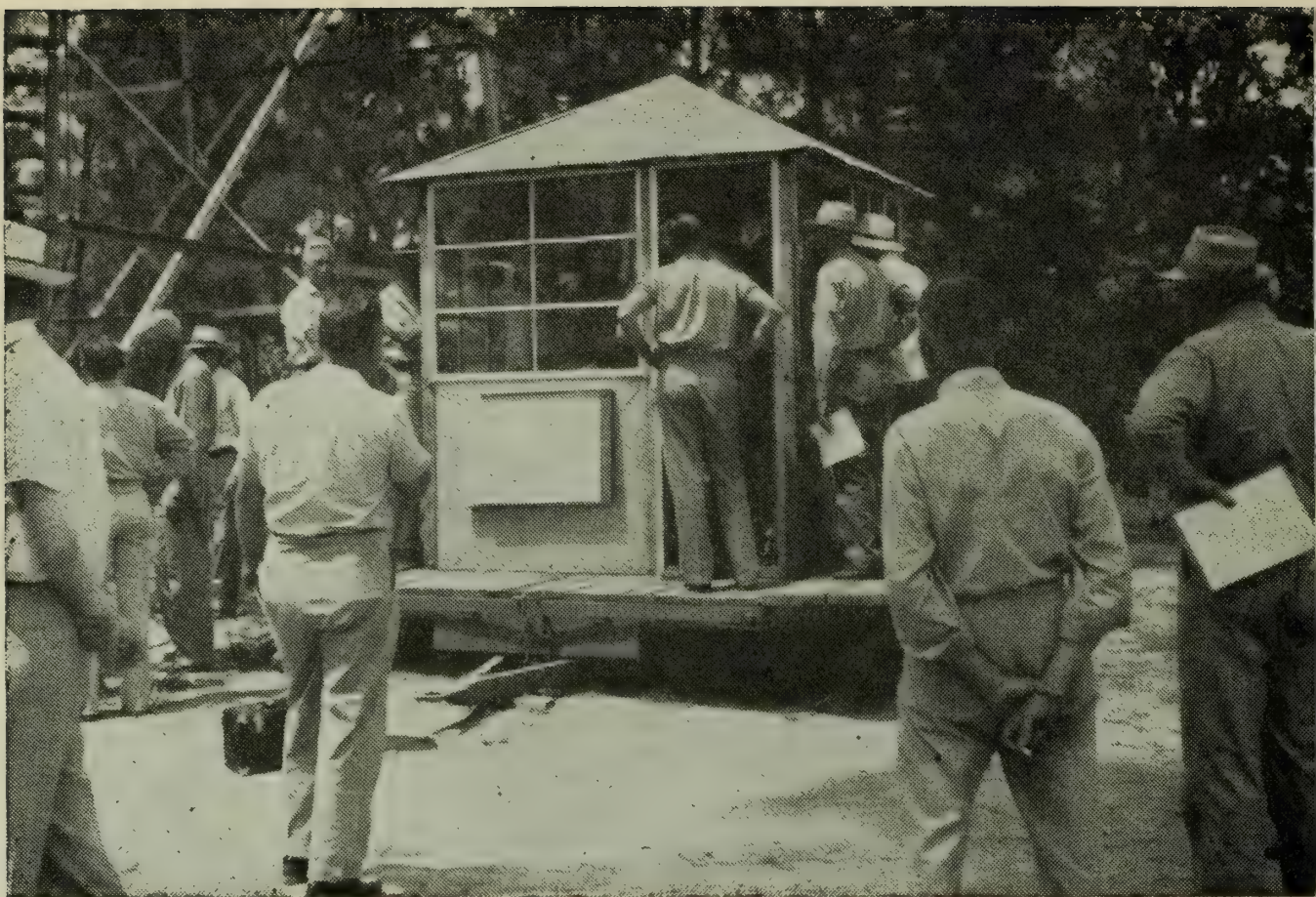
### **Southern States Fire Control Conference:**

This year forest fire chiefs, state foresters, radio engineers, and public relations men from 13 southern states and the U. S. Forest Service offices of Atlanta and Washington, D. C. met in Georgetown, S. C. for a four-day conference on fire protection work and to review new developments in fire fighting equipment and inspect the South Carolina fire protection organization. Many favorable comments were received from those in attendance as to the fire protection system now in effect within the State.

## **IMPROVEMENTS**

Fire protection improvement work consisted mainly of the construction of nine tower dwellings at new tower sites, this being





The state foresters and fire chiefs of 13 southern states met at Georgetown to confer on mutual fire protection problems and to study South Carolina's techniques. In the above photo they are studying a model tower cab installation standardized for South Carolina.

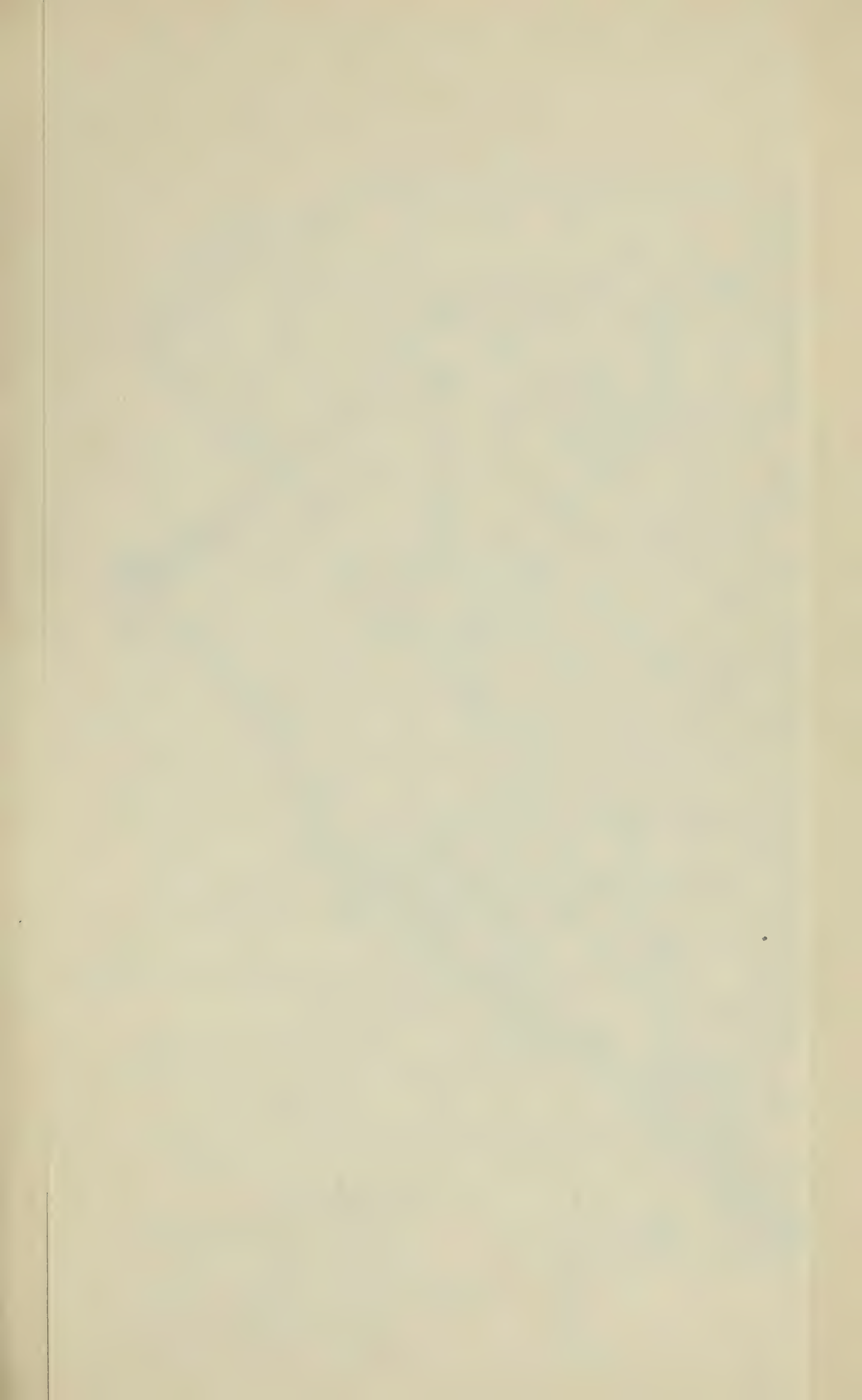
a continuation of planned fire protection permanent improvements for counties brought under protection during 1945-46. Much construction work remains to be done in order that all tower units be completed as planned for under state-wide protection.

Additions were made to the telephone and radio communication facilities to increase the efficiency of fire reporting.

### **Lookout Towers:**

One lookout tower was constructed during the year. This tower was constructed on Spring Hill in Lee county. The construction of a tower near Whitestone in Spartanburg county was held up pending the transfer of the Camp Croft area to the State as a park. With the construction of this tower the primary lookout tower system for the State will have been completed. There are now 155 lookout towers in the State. One hundred thirty-one are state-owned and operated, 3 are privately owned but state







N O R T H

C A R O L I N A

G E O R G I A

A T L A N T I C  
O C E A N

# SOUTH CAROLINA

## FOREST AREAS UNDER PROTECTION

### SHOWING

### LOOKOUT TOWER LOCATIONS

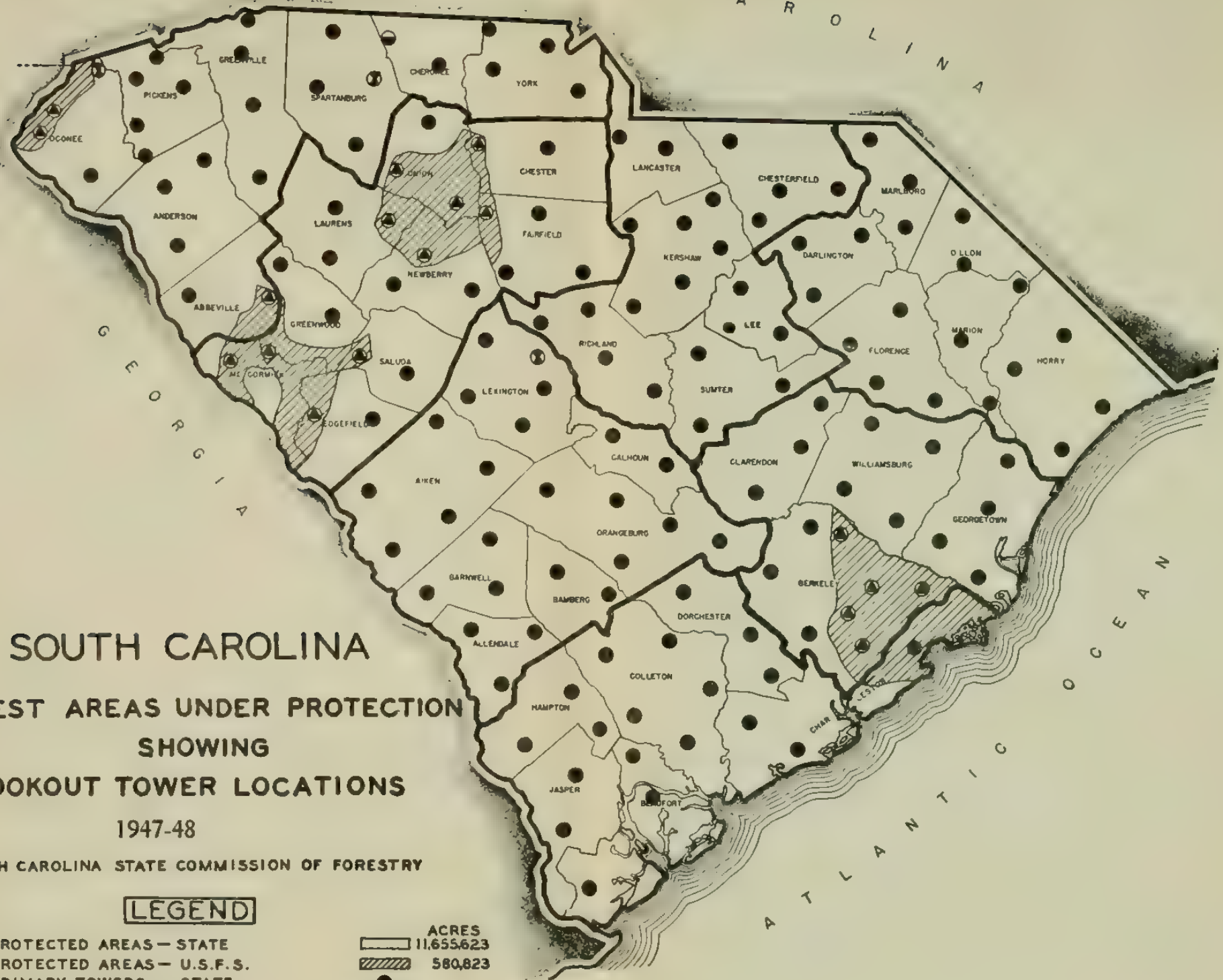
1947-48

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

**LEGEND**

PROTECTED AREAS — STATE  
 PROTECTED AREAS — U.S.F.S.  
 PRIMARY TOWERS — STATE  
 PRIMARY TOWERS PROPOSED — STATE  
 SECONDARY TOWERS — STATE  
 PRIMARY TOWERS — U.S.F.S.  
 FOREST DISTRICT BOUNDARIES

ACRES  
 11,655,623  
 580,823



operated, and 21 are owned and operated by the U. S. Forest Service on national forests.

Figure 2 shows a map of the State with approximate tower locations indicated.

### **Tower Unit Buildings:**

A complete tower unit consists of a lookout tower, dwelling, drilled well, barn, chicken house and latrine. During the year, nine tower dwellings were constructed on tower sites acquired since 1945-46, the year all counties came under state-wide protection. These dwellings were located on tower sites as follows: Oakway in Oconee county; Stringer Ridge in Anderson county; Appleton in Allendale county; Kelly in Union county; Pageland in Chesterfield county; Bamberg in Bamberg county; Way in Orangeburg county; Epworth in Greenwood county and Edgefield in Edgefield county.

Lumber for these dwellings was cut from Poinsett State Forest, dressed at the Sumter Warehouse and delivered to the site of construction. Construction was done in part by contract and in part by forces of the Commission of Forestry. The tower dwelling consists of four rooms, a poured concrete foundation and front and back porches. All foundations were completely shielded from termites. Construction was planned so as to allow for a minimum amount of maintenance in the years to come.

There still remain 21 dwellings to be constructed at new tower sites. No outbuildings have been constructed at the new tower sites to date.

Deep wells were drilled and pumps installed at 12 of the new tower sites.

### **Telephone Lines:**

An efficient communications system for reporting fires is essential to a good fire protection program. Marked improvement was noted in telephone line communication during the year. Most of the construction work having been completed, effort was directed toward bringing old lines up to standard, and in salvaging old lines where it was possible to make use of new commercial facilities.

Some of the work accomplished includes 61 miles of telephone line constructed, 81 miles of old line salvaged, 36.4 miles of old



telephone line relocated for better communication purposes, 61.6 miles of new attachments to commercial lines completed, 1,874.6 miles of telephone line right-of-way brushed out, 35 new telephones installed, 61 telephones replaced, 141 new line switches installed, 56 towers and 45 tower dwellings rewired, and 11 overhead railroad crossings installed.

The Commission of Forestry now operates 2,348 miles of telephone line in carrying out its fire protection work. All maintenance and construction work was accomplished by district and county unit forces.

Other telephone communication accomplishments include the completion of a manual of instruction for use of Volt-Ohm meters in loop mile testing, construction and installation of 150 telephone holders at telephone stations and a Commission of Forestry telephone directory was completed and issued to all telephone stations. It is planned to continue improvement of the communications system each year by eliminating lines where commercial connections are possible, and by keeping abreast of new developments in telephone communications.

Requests for private telephone connections or wire attachments were quite numerous. For efficiency of operation for fire protection purposes, such requests must be restricted to a minimum.

### **Radio:**

Frequency modulations two-way radio greatly improved fire protection communication facilities. Installation has progressed on the basis of two sets per county, one set for the dispatching tower and one set for the ranger's pickup truck. Installation was begun in the coastal counties and has progressed into the upstate counties as funds became available for purchase of equipment. Equipment should be purchased and installations made in the 23 counties not now having two-way radio within the next two fiscal years. A total of 20 sets were installed in the following counties during the year: Kershaw, Clarendon, Aiken, Orangeburg, Allendale, Greenville, Marion, Florence, Marlboro and Dillon counties.

These radio sets were purchased at half price; being factory rebuilt equipment, each set carried full factory guarantee.

There are now 46 radio sets in operation in conjunction with fire protection work. To allow for a minimum of interference

between stations, two crystals were installed in most sets which enabled the operators to use two frequencies. By this arrangement, tower or truck units do not become blocked when transmitting or receiving.

At the towers, transmitters and receivers were installed in a covered case on the ground rather than in the tower cab, as was initially the procedure. This new location facilitates maintenance and allows more space in the tower cabinets. Maintenance costs for all radio sets averaged about \$22.23 per county.

Special training in radio operation was given during the year. This included the use of a signal system to minimize time on the air and to simplify log keeping.

The Commission continued cooperation with certain large timberland owners in the use of radio on the Commission's assigned frequencies. A total of 10 sets are being used by these concerns exclusively for fire protection purposes.

### **Fire Breaks:**

Due to curtailment in funds available for fire break work, the number of tractor plow units operated was reduced under that of the previous year from 6 to 4. A tractor plow unit consists of a heavy tractor, approximately 35 h.p., an Athens 4-disc plow, a Mathis 2-disc plow and a 2-ton truck with trailer for transportation of equipment from one property to another. These units plowed fire breaks for landowners on a planned schedule in the sandhill and coastal counties.

A total of 845.7 miles of old or previously constructed breaks were maintained, and a total of 1,389.8 miles of new fire breaks were constructed, making a total of 2,235.5 miles of fire breaks plowed. These fire breaks serve to break up extensive woodland tracts into smaller units for ease in protection work. In the event a fire should occur, a break may serve to stop the spread or furnish a line from which manpower and equipment would be able to take suppression action. Fire breaks further serve to prevent breakover of fires that have been brought under control.

Property owners having fire breaks plowed with state-owned and operated equipment paid for this service at the rate of \$4.00 per tractor mile for construction of new breaks and \$3.00 per tractor mile for maintenance of old breaks.





The indirect method (back-firing) of combatting forest fires combined requires the use of motorized equipment and manpower for safety and efficiency.

A large number of woodland owners plow their own fire breaks each year, using either farm or regular fire break equipment. Some of the larger owners who plowed breaks include the West Virginia Pulp and Paper Co. with 1,175 miles plowed and the International Paper Co. with 890 miles plowed.

#### **Fire Danger Measurement Stations:**

Continued and expanded use was made of the fire danger measurement stations. There are a total of 43 such stations in operation.

These stations are used to determine the degree of fire hazard during any one day, the degree of fire hazard being classed from one to five, class one being low fire hazard and class five very high fire hazard. The 43 state-operated stations are in use by the county unit organizations. These stations are located at one of the lookout towers within the various units. Class fire day



readings are made four times a day during fire season. Reports as to class fire days are transmitted by telephone and radio from the tower station to other personnel of the organization. Unit rangers govern work plans for all personnel in accordance with the class fire day readings. They may increase or decrease fire fighting crews depending on fire danger as predicted by the fire danger station.

Operators of the fire danger stations were given intensive training in the operation of the station and record-keeping. Fire danger stations were relocated in a few instances to more favorable sites in order to obtain accurate readings.

### ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

Items	Estimated Value
131 lookout tower units .....	\$ 765,700
1,177 miles of truck trails .....	2,942,503
2,348 miles of telephone lines .....	406,000
46 radio installations .....	28,320
43 fire danger stations .....	3,000
	<hr/>
	\$ 4,145,523

### EQUIPMENT

The only fire equipment purchased was primarily for replacement of worn-out equipment. All of the new county units were initially equipped during the two previous years. A number of old model trucks are still on hand and must be replaced as soon as funds become available. A total of 6 pickup trucks and three 2-ton trucks were purchased for replacement of old, wornout vehicles. To assist in fire control permanent improvement construction and maintenance, a cement mixer and 3 trucks were purchased.

All pickup trucks and suppression heavy trucks were equipped with panama pumps, racks for carrying backpack pumps and other hand tools.



The following is an inventory of equipment on hand with estimated value.

Items	Value
3,491 backpack pumps -----	\$ 38,401.00
7,667 fire rakes -----	11,500.00
3,576 fire swatters -----	7,509.60
4 crawler tractors -----	19,300.00
31 wheel-type tractors -----	43,400.00
10 heavy-duty plows -----	5,800.00
6 heavy equipment trailers -----	11,500.00
1 heavy-duty semi-trailer -----	1,800.00
18 light trailers -----	1,800.00
52 pickup trucks -----	53,700.00
5 sedan delivery trucks -----	6,165.00
39 LWB trucks -----	61,250.00
5 truck tractors -----	8,000.00
	<hr/>
	\$270,125.60

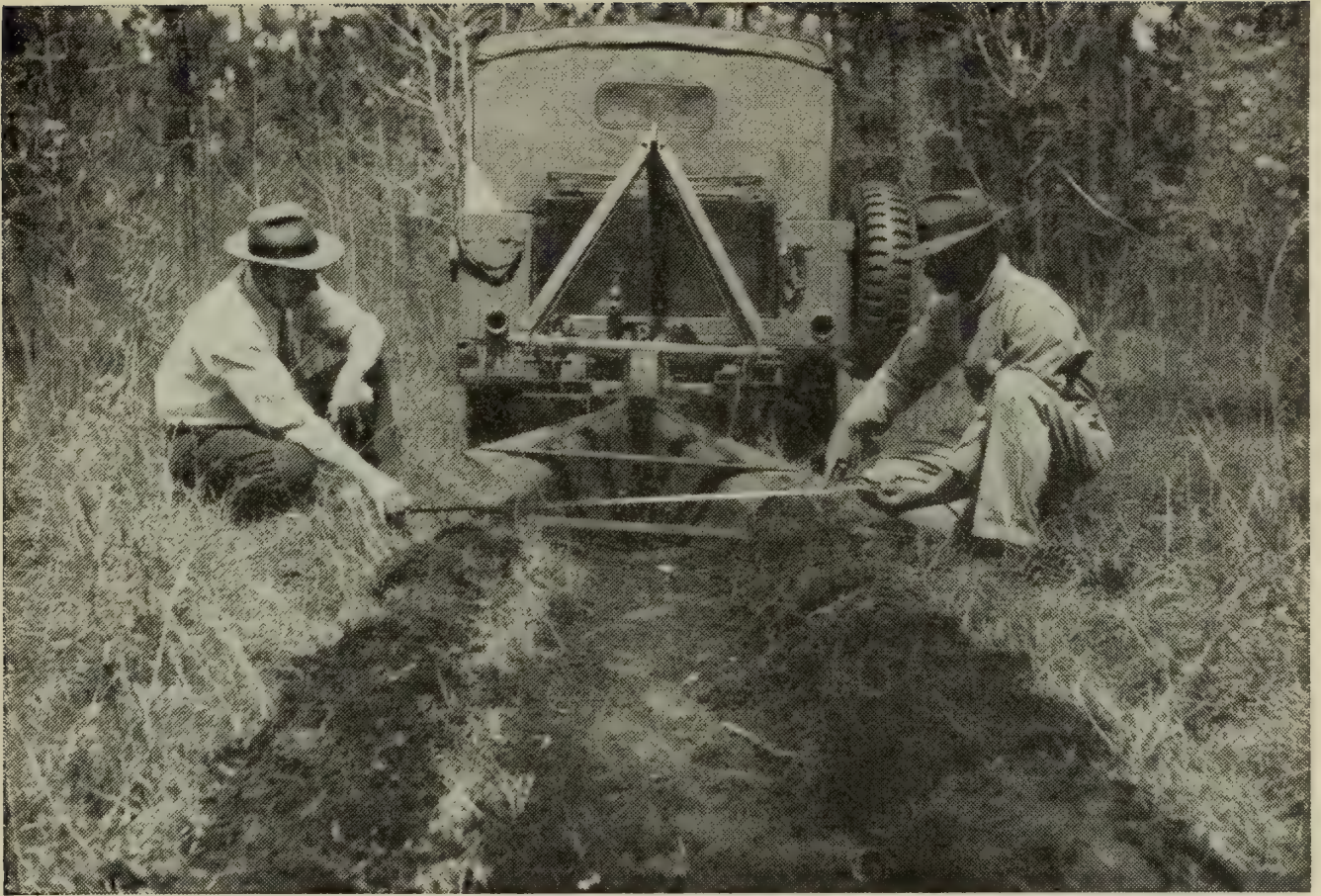
#### **Equipment Maintenance Shop:**

The maintenance shop at Sumter was operated in much the same manner as during the previous year. Repairs were made on heavy tractor equipment and major repairs were made to county unit trucks, all used on fire suppression. The installation of pumps and other equipment on trucks was also accomplished at the shop. A total of four major overhauls on crawler type tractors and 155 overhauls to trucks and light tractor equipment were made. Seven heavy fire break plows were also given repairs. All of this work was done at a considerable saving in cost to the Commission. The commercial value of all repair jobs was estimated to be \$4,549.50. However, the Commission's cost for repairs amounted to \$2,619.00, or a saving of \$1,930.50.

Three mechanics were employed in the field and shop in making mechanical inspections and repairs to all fire equipment. These men made a total of 410 inspections, and 143 minor repairs were made at the time of inspection. Shop equipment purchased included a 300 amp. arc-welder and miscellaneous small tools.

Mechanics gave operation and safety instructions to operators. They also assisted in training personnel in the care of equipment.





Authorities on equipment study results of fire suppression plow developed by Commission personnel.

### **Experimental Work:**

Considerable work was done in developing a new light suppression plow suitable for use with either a light tractor or truck. This development work resulted in the construction of ten of these light suppression plows. These plows have been distributed to the field for use in fire fighting work. Some experimenting was done with pressure pumper units; also, preliminary work was done on the construction of a highway shoulder burner and backfire torch.

### **Warehousing:**

The Sumter Warehouse was operated for the storage of construction materials, fire tools and other equipment prior to shipment to the field. This project was administered jointly with the other branches. A planer was operated adjacent to the warehouse for the preparation of lumber for tower dwelling construction and maintenance. This unit was shut down near the



close of the season when all lumber for construction had been processed.

### **Map Project:**

Sufficient maps were prepared in the photographic room at the warehouse for ranger and warden use. In addition, maps were made for replacement in towers when necessary. All maps printed carry the special grid system now in use for forest fire location purposes. Considerable trouble was experienced with tower maps installed in towers due to the constant fluctuation of temperature and moisture. A map case was therefore devised which provides sufficient insulation to the map, preventing fading and separation from the map board. These map cases have been installed in all towers of the state.

The same difficulty was experienced with azimuth circles. It is believed that this has been overcome through the use of aluminum circles fastened to the tower cabinet top. The silk-screen process was used for placing degree markings on the circles.

## **FOREST FIRE PLANS**

In past years, each fire protection unit has operated without a definite plan or procedure for handling the fire suppression job. As a result, there has been considerable disunity in the coordination of manpower and equipment to adequately handle fire suppression during fire hazard periods.

To this end, effort was directed toward the preparation of a detailed fire plan for each county unit, the purpose of the fire plan being to set forth a standard and specific procedure for the control and operation of a county fire protection unit in order to provide an efficient organization for the control of forest fires.

The fire plans are to be used by the respective district offices and county protection units as a reference and guide during periods of high fire hazard and fire occurrence, and likewise, it is to be used as a guide for organizational operations during periods of low fire hazard and low fire occurrence. It is intended that the plan be used at training meetings for district and county unit personnel in order that they may become fully acquainted with procedures to be followed in handling the protection organization.

By the end of the fiscal year, fire plans had been completed for 23 county units and were partially complete for the remaining counties. These fire plans will be put into use during the coming fire season after training has been given.

### FOREST FIRE SUMMARY

Fire records show that South Carolina had its most favorable forest fire year since the start of fire protection on a county unit basis. This includes the period of county protection prior to the setup of the state-wide system.

Generous rainfall during almost every month of the year created unfavorable burning conditions. No extended hazardous fire periods occurred. Rainfall records for the year indicate a 11.87" departure from normal for the State as a whole.

There were, however, short periods during the months of February, March and April when fires aided by high winds burned considerable areas of woodland.

Favorable weather conditions, however, cannot be credited as the sole factor responsible for the comparatively small woodland area burned by wild fires. Each county unit organization performed well in fire prevention and in stopping the spread of those fires that were started. Through the efforts of suppression forces, many thousands of acres of forest land were saved from the ravages of wild fire.

#### Acreage Burned (Wild Fires):

For the entire year, a total of 3,149 fires burned 46,959.8 acres of woodland. This may be compared with the fiscal year 1946-47 when 6,601 fires burned 232,040 acres of woodland in the State. This represents a reduction of approximately 53% in fire occurrence and 79.8% in area burned.

The month of February proved to be the worst fire month of the year when 558 fires burned 14,329.5 acres. Fire occurrence was confined mostly to the months of February, March and April. During this period, 60.5% of all fires for the year occurred.

Saluda county had the smallest number of fires, a total of 14 with 130.4 acres burned. Pickens county had the smallest area burned, a total of 83.6 acres, or .04 of one percent of the total area protected. Pickens county also had the smallest average size



fire, an average of 2.3 acres per fire. Horry county had the highest percentage, 1.17%, of forest land burned.

### **Causes of Fires:**

As in previous years, the greatest cause of forest fires was attributed to smokers. This cause represents 31.2% of the total number of fires for the year. Incendiarism was responsible for the second greatest number of fires, with 28.5% of the total number. Debris burning was the third highest cause of fires, with 19.5% of the total number.

Fire prevention efforts are directed toward the elimination of all fires. Since 97.9 percent of all fires are man-caused, effort was directed toward the reduction of all such fires. As a part of this prevention program, a special survey of railroad fires was conducted. A summary of this survey discloses that 221 fires resulted from railroad operations. A total of 2,436 acres were burned by these fires. The railroad fires originated from the fol-



Some twenty percent of the forest fires in South Carolina are caused by brush burners. This landowner is taking the necessary precautions before striking the match — plowed firebreak, small brush piles, calm, damp day.



lowing sources: Sparks from stacks, 186; coals from ash pans, 26; right-of-way burning, 4; section hands, 2; passengers, 2; and 2 were of unknown source.

Much the same pattern resulted from a summary of railroad fires for the previous year. A much larger number occurred during the previous year, due to higher fire hazard conditions.

Railroad fire occurrence can be reduced by: 1. Recognition of the existing fire hazard along railroads and the reduction of that hazard by burning railroad rights-of-way. 2. Construction of fire breaks where woodland areas lie adjacent to railroad tracks. 3. The burning of rights-of-way early in the fall or middle of the winter, using precautions as to weather conditions and proper burning procedures. 4. Proper maintenance of railroad engines, stacks, screens and ash pans. 5. Cooperation between the various railroads and private landowners as well as local Forestry Commission personnel in prevention and suppression efforts.

### **Legal Fires:**

As provided by law, any forest landowner is not restricted from burning over his land as long as his fire is not allowed to spread onto, or over the lands of another or others.

Each year large areas of woodland are burned either by the owner, his tenant or agent. Some of the reasons for burning along with the acreage burned during the year are: 1. Production of game birds and maintenance of a timber and ground cover conducive to easy shooting, 83,167 acres were so burned. 2. Forest fire hazard reduction, 51,048 acres burned for this purpose. 3. Woodland pasture burning to produce early grass, 11,333 acres burned. 4. Miscellaneous reason such as to kill the boll weevil, snakes, foxes, rabbits, ticks, etc., a total of 4,032 acres burned. For all purposes, a total of 1,472 legal fires were set, burning a total of 149,580 acres of forest land. This represents 1.3% of the total woodland area under protection and involves some forest land in 43 of the 46 counties of the State. An aggregate of 94,520 acres were burned for game and cattle, with no particular regard for the present or future timber stand. Burning of this nature is characterized by heavy loss to both timber and land values.

The Commission's fire protection forces must make efficient use of its limited personnel and equipment in controlling illegal or wild fires. However, it is necessary that rangers and wardens



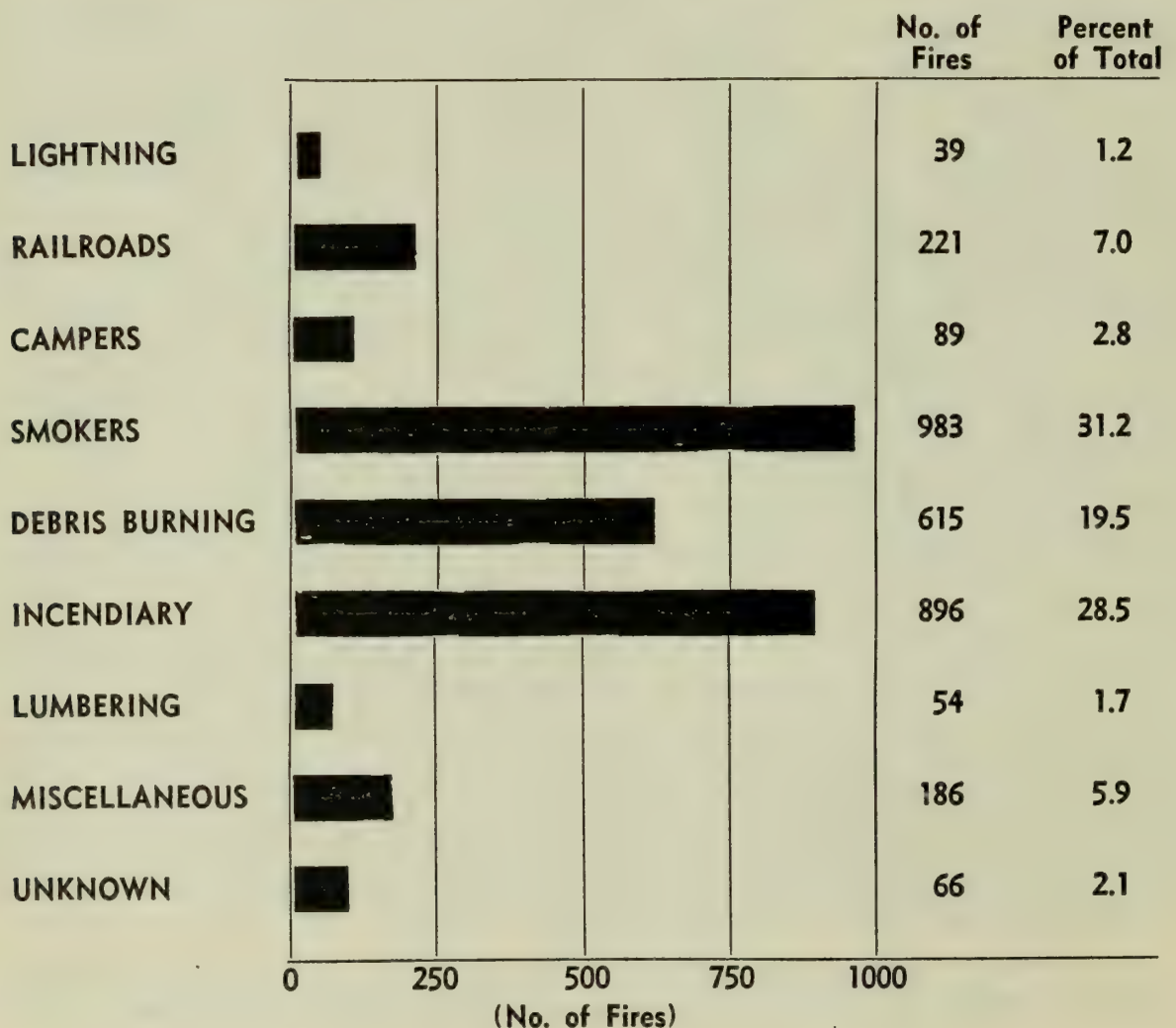
investigate numerous legal fires reported to them by lookout towers while their services are needed elsewhere on illegal fires. Especially is this true during periods of high fire hazard. Land-owners are encouraged to report their intent to burn; however, only 331 of the 1,472 legal fires were reported prior to their being set.

Many fires legally set but not reported, burned onto lands of another due to lack of proper precautions to prevent their spread. Considerable damage was sustained before such fires could be brought under control. Responsibility in these cases was very difficult to place.

This problem reflects the need for more effort to secure reports of intended burning prior to the time of the actual setting of the fire. More especially does it indicate the need for a burning permit law as previously discussed in this report which would re-

### CAUSES OF FOREST FIRES IN SOUTH CAROLINA

July 1, 1947-June 30, 1948

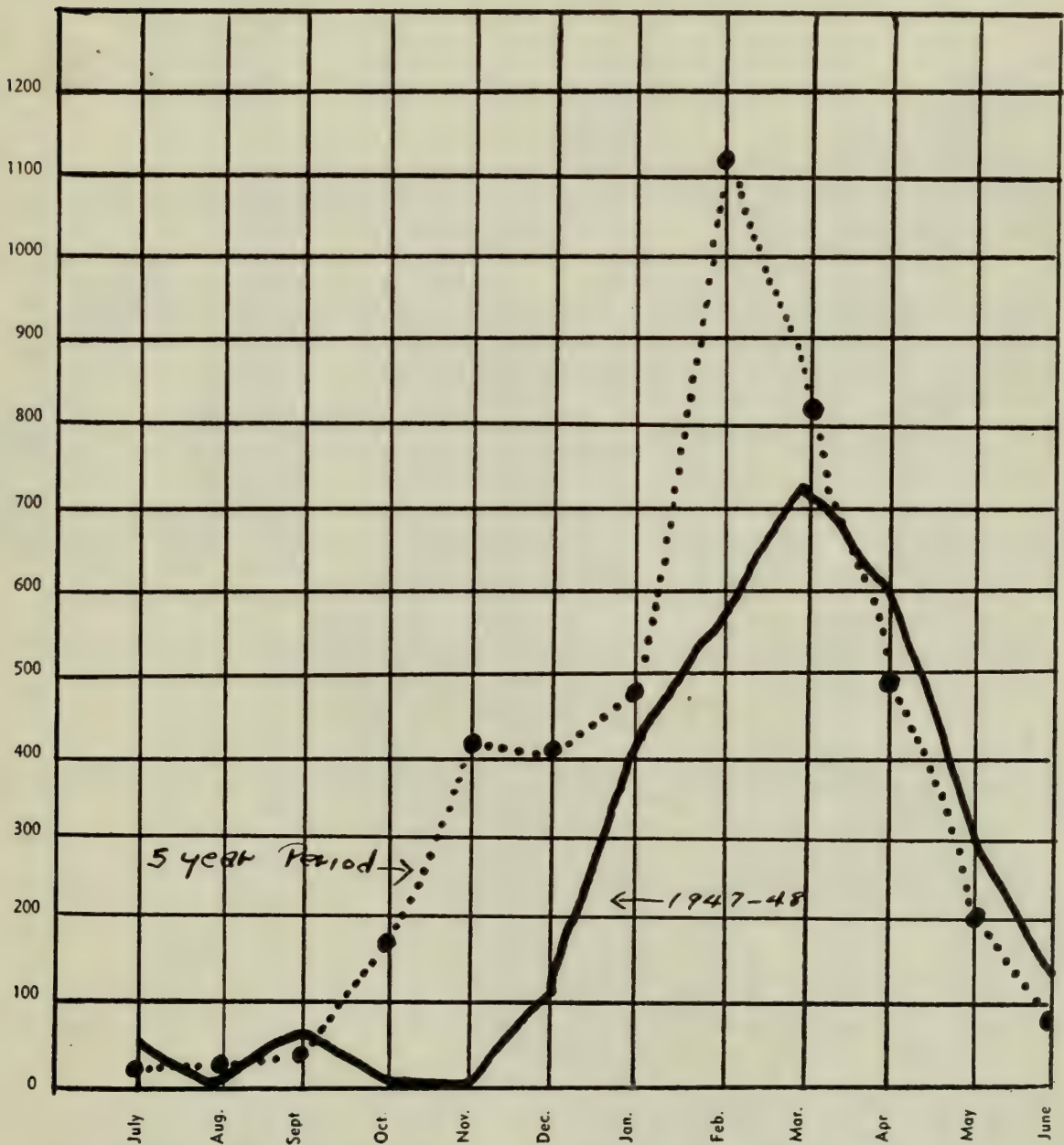




quire intentional burners to secure a permit from designated representatives of the Commission prior to burning.

A study of illegal forest fire statistics as presented in the appendix of this report gives detailed figures on causes of fires, area burned and percent of loss for the year. The accompanying chart and graph give information as to fire occurrence and fire cause.

### COMPARISON OF AVERAGE NUMBER OF FIRES BY MONTHS FOR THE FISCAL PERIOD 1942-47 AND FISCAL YEAR 1947-48



Average area under protection fiscal period 1942-47—8,238,536 acres.  
Area under protection fiscal year 1947-48—11,542,170 acres.





Forestry is big business in South Carolina. Only by the prevention of forest fires and the widespread adoption of good forest management can this business continue. If these measures are taken the growth of forest products may be increased three-fold.



## FOREST MANAGEMENT

The demand for and production of all forest products in South Carolina continues at a very high level. Studies made by the U. S. Forest Service indicate that the demand for practically all classes of forest products will continue for at least the next four or five years. Since our sawtimber growing stock has been decreased during the past ten years, South Carolina must take the necessary action to build up sawtimber growing stock and to make all forest land more productive.

### PRODUCTION BY YEARS

Year	Lumber	Pulpwood
1942	1,079,351 M Bd. Ft.	946,000 Cords
1943	984,773 M Bd. Ft.	985,000 Cords
1944	850,748 M Bd. Ft.	1,053,500 Cords
1945	723,667 M Bd. Ft.	877,500 Cords
1946	1,005,700 M Bd. Ft.	995,700 Cords
1947	1,110,000 M Bd. Ft. (est.)	948,388 Cords (est.)
1948	1,109,000 M Bd. Ft. (est.)	997,807 Cords (est.)

Since South Carolina woodlands are only one-third to one-half productive and since many wood-using industries are interested in locating in sections where timber supply and other needs are available, it is possible for South Carolina to greatly step up the importance of the forest lands of the State for the economic and social betterment of the people of the State by taking those steps necessary to make all forest land more productive.

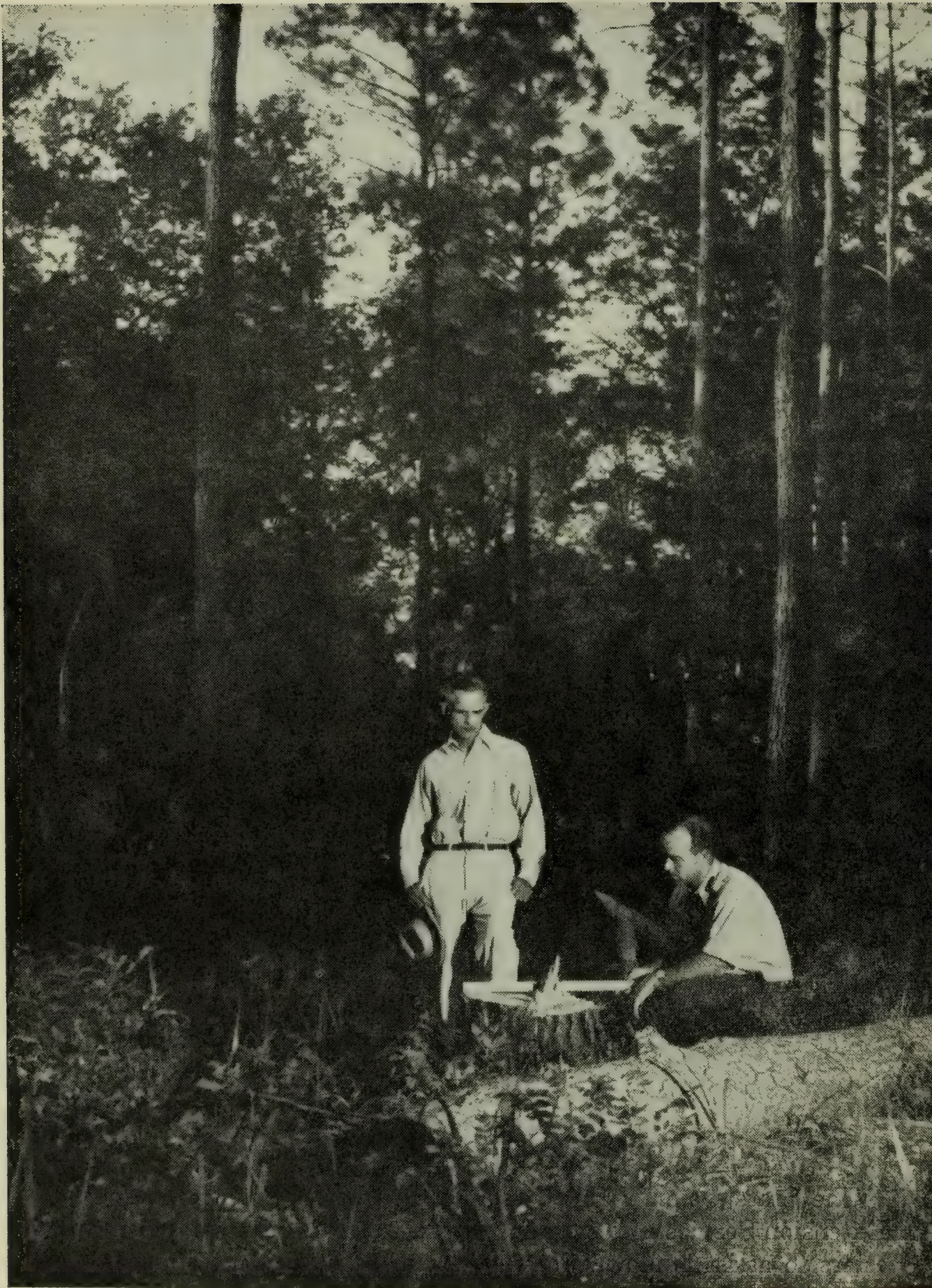
Forest management activities of the State Commission of Forestry conducted to improve the forestry situation and to better all of the people of the State are explained in detail on the following pages.

### MANAGEMENT ASSISTANCE

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing technically trained foresters to assist landowners in managing their timber lands.

Any landowner in the State can receive this service. A forester, with the landowner or his agent, will look over the woodland,





**Trained foresters furnish forest management assistance to private landowners.**





Private landowners take advantage of professional advice on forest management. District foresters and assistants furnish advice and if cutting is recommended will: (1) Mark the landowner's timber for selective cutting; (2) Furnish an estimate of number of board feet or cords marked; (3) Help channel timber into the most profitable market; (4) Help prepare a suitable sales contract.

give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection and reforestation measures needed.

In cases where cutting of timber is recommended, a representative of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a timber sale agreement. The only charge for this service is \$.25 per thousand board feet or \$.10 per cord for timber actually marked and tallied. All other services are provided free of charge.

During the year 545 woodland examinations were made on 148,577 acres of forest land, and a total of 19,788,388 board feet and 3,500 cords were selectively marked for 208 landowners on 13,477 acres of forest land.



**DISTRICT SUMMARY OF WOODLAND EXAMINATIONS AND MARKING ACTIVITIES—  
1947-1948**

DISTRICT	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulpwood
Aiken .....	119	26,641	74	3,719	5,031,247	496.5
Camden .....	74	12,892	28	1,400	2,188,482	1,602.1
Florence .....	72	8,065	25	1,114	1,636,995	344.7
Kingstree .....	35	35,683	12	2,118	2,328,743	.....
Newberry .....	125	23,371	29	1,923	4,170,833	937
Spartanburg ...	86	14,112	30	2,314	2,925,298	120
Walterboro .....	34	27,813	10	889	1,506,790	.....
TOTALS ...	545	148,577	208	13,477	19,788,388	3,500.3

**SUMMARY BY YEARS**

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulpwood
1941-42 .....	213	37,500	84	14,792	8,271,202	.....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
TOTALS ..	2,083	681,689	861	98,803	123,487,484	11,015.3

Stumpage prices of sawtimber were even higher than they were the previous year. A summary of 31 sales covering 4,850,777 board feet indicates an average of \$22.12 per M board feet for standing trees. The prices range from \$12.00 to \$41.20 per M board feet.

**REFORESTATION**

A total of 11,457,490 seedlings were distributed from the Horace L. Tilghman nursery at Wedgefield. Distribution by species was as follows:

Loblolly .....	4,413,000
Slash .....	5,671,600
Longleaf .....	999,040
Lowland Spruce Pine .....	373,850
Total .....	11,457,490





**Planted slash pine on poor land AFTER thinning! Over 14 cords per acre were removed from this 17 year old stand in Kershaw County.**

Of this total 11,356,990 seedlings were distributed in South Carolina to 1155 planters. Requests by large planters had to be reduced, and in spite of this, a large number of small orders were unfilled.

The General Assembly again made it possible for any landowner in the State to receive up to 5,000 seedlings free of charge at the nursery or at \$.50 per thousand delivered to his closest express office. For any number in excess of 5,000 per landowner, the cost was \$2.00 per thousand at the nursery or \$2.50 per thousand delivered to the closest express office. See Tables 12 and 13 in the Appendix for a record of seedling distribution by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years:



Year	Seedlings Planted
1928-29	142,000
1929-30	148,000
1930-31	986,000
1931-32	976,000
1932-33	996,000
1933-34	1,031,000
1934-35	7,529,000
1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600
1947-48	11,356,990
Total	154,591,763

The new nursery at Wedgefield is meeting all expectations as far as making the ideal forest tree nursery is concerned. Inventories indicate that more than 25,000,000 seedlings will be available for distribution during the winter of 1948-49. Permanent improvements constructed during the year include a packing shed and office, a foreman's residence, and two laborers' houses. In addition, a Reco-Fab refrigeration unit measuring 24'x12' was purchased and assembled in the old packing shed at Sumter. This will be used for seed storage and treatment.

### CONE COLLECTION

The cone crop for the Fall of 1947 would be considered fair as compared with the 1946 bumper crop. The district foresters were able, however, to secure the cones desired to produce seedlings needed. The number of bushels of cones collected by species and by districts is shown in the following table:





Forest tree seedlings growing in beds this year at the Wedgefield Nursery. More than 25,000,000 seedlings will be available for planting during the winter 1948-49.



Lowland					
District	Slash	Loblolly	Spruce Pine	Cedar	Poplar
Aiken .....	200	174.5			
Camden .....		714.5			
Florence .....		753.5			
Kingstree .....		819.5			
Newberry .....		1,522.75			
Spartanburg .....				2#	400#
Walterboro .....	400				
Poinsett .....		500.0			
West Va. Pulp & Paper Co. ....		30.0	80		
Totals .....	600	4,514.75	80	2#	400#

As seen in the above table, West Virginia Pulp and Paper Company also cooperated by collecting some loblolly and lowland spruce pine cones.



From all over South Carolina cones are collected and stored in drying barns. These cones produce the seeds that are extracted for planting in nursery beds at Wedgefield.



From these cones listed in the above table, 4110.5 pounds of seed were extracted as shown in the following table:

#### Seed Extraction Data

Species	Bushels	Pounds	Pounds per Bu.
Slash -----	600	516.0	.86
Loblolly -----	4,514.75	3,145.5	.70
Lowland Spruce Pine --	80	47.0	.59
Cedar -----		2.0 (uncleaned seed)	
Poplar -----		400.0 (uncleaned seed)	

In addition 200 pounds of slash pine seed, and 1075 pounds of loblolly pine seed and 10 pounds of Arizona cypress seed were purchased on the open market.

At the end of the year there were 484 pounds of slash, 2219 pounds of loblolly, and 2050 pounds of longleaf pine seed in storage for use during the next year.

#### FOREST SURVEY

The South Carolina State Commission of Forestry cooperated with the U. S. Forest Service through the Southeastern Forest Experiment Station in completing a re-survey of the forest resources of the State. Field work was completed during the year, and a complete report showing results of this survey will be published during the next fiscal year.

#### FARM FORESTRY

The farm forestry project with headquarters in Aiken, S. C., continues to give additional forest management assistance in Aiken, Barnwell, and Orangeburg Counties. A summary of the farm forester's accomplishments is included with the data for the Aiken District. In addition to woodland examinations and reports, the farm forester marked 2,034,370 board feet of saw-timber and 323 cords of pulpwood for 29 landowners.

#### COUNTY AND STATE FORESTS

No additional state forest land was acquired during the year, but the total acreage dropped from 138,574 acres to 133,241 acres. This decrease in acreage was caused by redemption of 5,333 acres of Aiken County Forest Land by former owners and by sale of a few small tracts of Aiken Forest land.



Work on management plans started during 1946-47 progressed satisfactorily and preliminary work was completed on Poinsett State Forest and about one-half of the preliminary work was completed on Sand Hills State Forest.

Prior to acquisition, almost all of the land in state forests was heavily cut over, burned, and generally misused. For that reason it will take a number of years to re-build these areas to a productive condition.

The state forests are listed below:

1. Aiken County Forest .....	8,938 acres
2. Cassatt State Forest .....	462 acres
3. Harbison State Forest .....	2,202 acres
4. Phelps State Forest .....	809 acres
5. Poinsett State Forest .....	28,830 acres
6. Sand Hills State Forest .....	92,000 acres
<hr/>	
Total .....	133,241 acres

A detailed report of activities on each of the Forests follows:

### AIKEN COUNTY FOREST

During the year the acreage in Aiken County Forest dropped from 14,271 acres to 8,938 acres. This loss in acreage is caused by former owners, heirs, or others of interest redeeming approximately 5,333 acres during the year. Act No. 748 of 1946 provides that a former owner, heir, or others of interest, may redeem forfeited lands within ten years after forfeiture by paying taxes, penalties, cost of betterments and expenses of Aiken County Forest, less any amount of revenue received by Aiken County Forest.

To date boundary surveys have been completed on 64 tracts aggregating approximately 12,267 acres. Concrete monuments have been erected at all property corners. All property lines have been thoroughly brushed out and marked with orange paint. Plats of all surveyed tracts have been prepared and filed for record in the office of the Clerk of Court of Aiken County together with deeds and leases.

The Edisto District of the U. S. Soil Conservation Service has surveyed and prepared soil maps of 45 tracts of Aiken



County Forest. They have also made recommendations as to the best use of these lands. None of this work, however, was completed during this year.

This year 34.5 miles of firebreaks were plowed on 6 tracts, involving approximately 1130 acres. The Aiken Unit Fire Control Organization handled fire suppression on the Forest. Two fires burned 32 acres of Aiken County Forest land during the year. These figures are included in the Fire Control Section of this report under Aiken County.

During the year 40 acres were planted to pines. This brings the total area planted to date up to 1823 acres on 51 different tracts of the Forest.

Only two free use permits were issued. In addition, eleven special use permits were issued, covering the cutting of 2500 board feet of sawtimber, five cords of pulpwood, and four cords of fuelwood. Ten special use permits covering rental of 205.2 acres of farmland were issued.

### **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres, which is composed largely of scrub oak and open fields. Little work was done on the area during the year and no fires occurred on the area.

### **HARBISON STATE FOREST**

Harbison State Forest, comprising 2,202 acres, is located in Richland County. No cutting was done on the area during the year.

The management plan for this area indicates no cut for the present, the idea being to build up growing stock on the area, and then after a few years start an annual cutting program with the cut limited to timber that is in need of cutting for thinning or improvement.

The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the caretaker. No fires burned on the area during the year.

### **PHELPS STATE FOREST**

Phelps State Forest is made up of 809 acres of Sand Hills land located in Barnwell County. It was donated to the S. C. State



Commission of Forestry by Miss Claudia Lee Phelps of Aiken, S. C.

No cutting was done on this area during the year. Most of the area is covered with scrub oak, although there is considerable merchantable timber in spots. This timber is growing well and is not in need of being cut at the present time.

The Barnwell Unit Fire Control Organization handles fire protection and is assisted by the caretaker. No fires burned on the area during the year. Firebreaks were maintained as needed.

### POINSETT STATE FOREST

The 28,838 acres of land making up Poinsett State Forest is located south of Wedgefield in Sumter County. This land is leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government.

This area is in need of a tremendous amount of tree planting and other good forestry practices aimed at building up the productivity of the land.



Fifty-eight percent of all the land in South Carolina is classed as forest land.



### Management Plan:

Preliminary work on the management plan for this area was completed during the year. This consisted of the various areas being classified according to treatment needed. These areas are indicated on a map of the Forest and will form the basis for future work done on the Forest.

It is interesting to note that from this study it was determined that over 10,000 acres or more than one-third of the total area of this Forest is land that has been taken over by scrub oak as a result of over-cutting and wild fire in the past. The study also shows that there is a relatively small area with sawtimber or pulpwood that is in need of cutting.

### Tree Planting:

A total of 119,400 pine seedlings were planted on the Forest during the season. Species planted are as follows:

Longleaf Pine .....	42,500
Slash Pine .....	60,900
Loblolly Pine .....	16,000

Slash and loblolly pine were planted with the Lowther tree planter and the longleaf pine was planted by hand.

### Forest Products Harvested:

Products processed include the following:

Lumber (Bd. Ft.) .....	445,227
Pulpwood (Cords) .....	104
Fuelwood (Cords) .....	107.7
Posts .....	807
Logs (Bd. Ft.) .....	500 (approximately)

Of the 445,227 board feet of sawtimber cut on the Forest and manufactured into lumber, 273,147 board feet was sold largely to the other branches of the Commission of Forestry. The remaining volume is being held to supply the needs of the Commission during the next year. All of the trees cut were selectively marked before cutting.

The 158 cords of pulpwood was sold as stumpage to a local pulpwood producer, and most of this was salvaged from tops left after logging operations. The revenue from these sales



is clear profit and the Forest benefits additionally because the removal of this material decreases the fire hazard.

The 100 cords of fuelwood were sold locally and for the most part consisted of slabs and edgings from the sawmill.

Approximately 500 board feet of logs was sold to the Division of State Parks for the construction of camp fire circles for Mill Creek and Burnt Gin Group Camps.

### **Fire Protection:**

Three fires burned 4.6 acres during the year. The Forest organization is assisted in controlling woods fires by the Sumter Unit Fire Control Organization. Data on number of fires and area burned is included in the Fire Control Section of this Report with the Sumter County figures.

Approximately 100 miles of boundary and interior firebreaks were maintained on the Forest. In addition, 26 miles of firebreaks were plowed on Poinsett State Park and 17 miles on Milford Plantation by Forest personnel and equipment.

### **Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. These camps were used for a total of 7,326 camper days. A detailed report on these two camps will be included in the Parks Division Section of this report.

### **Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement by the Sumter County Board of Commissioners. The Board of County Commissioners works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to control the area, and handles the stocking of lakes with young fish where needed.

### **Agricultural Lands:**

Fifty-one tenants rented 1643.5 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the Forest and others assist where needed in the prevention and suppression of forest fires.



**Roads and Truck Trails:**

Ten miles of roads were machined and holes filled in where necessary, and two bridges on these roads were repaired.

**Telephone Lines:**

About one-half of the 25 miles of telephone lines in the Forest system was brushed out during the year. Because of the relocation of the King's Highway, it became necessary to move and relocate about 4 miles of telephone lines. General maintenance was carried on as needed to keep the telephone system in good working order.

**Silvicultural Practices:**

About 12 acres of planted slash pine was released by cutting the overtopping scrub oak. Twenty-five acres of forest land were direct seeded to longleaf pine; however, this method of reforestation did not meet with any success. Two hundred cork oak acorns and five Asiatic blight-resistant Chinese chestnuts were planted.

**Cone Collection:**

During October, Forest personnel collected 502 bushels of loblolly pine cones and turned them over to the nurseryman. The seed was extracted and used in the production of seedlings, some of which will be planted on the Forest during the next year.

**Maintenance and Repair:**

Four wells were made usable for tenants on the Forest. Three barns were repaired, and one tenant dwelling was repaired.

**Permanent Improvements:**

Five new buildings were erected on the Forest during the year. These were two residences, one garage, one new chicken house, and one planer shed. A comfortable three-bedroom house was built near Forest headquarters for the foreman. Near Week's Pond a laborer's house was constructed for one of the laborers whose house burned down during the year.



## SAND HILLS STATE FOREST

Sand Hills State Forest located in the scrub oak-longleaf pine type in Chesterfield and Darlington counties consists of 92,000 acres. One-half of the area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management on this portion of the Forest as well as being responsible for all activities and management of the other one-half of the Forest. This area is leased from the Federal Government on a 95-year lease agreement.

Before the area was acquired by the Government, it was heavily cut over, badly burned, and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand.

### Tree Planting:

During the year, 150,300 pine seedlings were planted. Species breakdown is as follows:

Longleaf Pine .....	5,000
Slash Pine .....	90,300
Loblolly Pine .....	55,000

Of this number 132,000 were planted in old fields with a Lowther tree planter. Total cost for planting these trees with the machine, exclusive of supervision and depreciation on equipment, was \$2.13 per 1,000 trees. An average of 12,568 seedlings were planted per eight-hour day.

### Forest Products Harvested:

The following forest products were selectively marked and sold from the forest during the year:

Sawtimber (Bd. Ft.) .....	322,487
Pulpwood (Cords) .....	223.4
Posts (Number) .....	163

The average stumpage price received for sawtimber was \$25.90 per thousand, Scribner Rule.



### **Fire Protection:**

Fire loss was held to fifteen fires which burned 491.3 acres. Fire protection is handled by the Chesterfield Unit Fire Control Organization assisted by the forest personnel. The fire record this year was by far the best to date.

A total of 137.25 miles of firebreaks were plowed on the forest with a Ford-Ferguson tractor equipped with a Love gang disc plow. These breaks were from 8' to 16' wide, and because they could be plowed with light equipment, the cost was very little.

### **Recreation:**

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area, and latrines provided. The 14 Boy Scout Troops located in Chesterfield county use this area and facilities for over-night camping. The District Scout Camporees are also held here. The lake is open to fishing and bathing but no swimming is allowed.

Campbell's Pond, colored recreational area, has been reactivated and improved by the Parks Division of the State Commission of Forestry, and has been redesignated Campbell's Pond Negro State Park. This area has been further developed and received very heavy use during the year. A more detailed report will be found in the Parks Section of this report.

### **Fish and Wildlife:**

No hunting was allowed on the area during the year, but plans call for the establishment of areas for game preserves on which no hunting will be permitted. It is planned that the majority of the area in the future, however, will be open to public hunting.

Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the State game and fish laws.

### **Agricultural Lands:**

Thirty-six tenants rent and farm 1,817.8 acres of agricultural land on the forest. Practically all of the lands, which were



formerly cultivated and which are too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

### **Roads and Truck Trails:**

During the year 68.2 miles of truck trails were graded, brushed out, and washes filled in. Eighteen wooden culverts were cleaned out and stringers and decking repaired. Nine timber bridges were repaired by replacing rotten deckings and rails. Eighteen diversion ditches were cleaned out. One mile of road near headquarters was treated with clay topsoil.

### **Telephone Lines:**

Maintenance of all telephone lines is being handled by the Chesterfield Unit Fire Control Organization, but during the year forest personnel assisted by repairing 15 interruptions of service on the line and by replacing one broken pole.

### **Silvicultural Practices:**

Silvicultural activities included prescribed burning, release cutting, pruning, fertilizing, poisoning scrub oaks, and clearing scrub oak areas followed by tree planting.

Two areas totaling 61 acres were burned intentionally during the year to determine whether fire would eliminate brown spot needle disease of longleaf pine, and to determine the possibilities of using fire as a tool to eliminate scrub oak. Indications are that the young longleaf pine with brown spot was improved by this burning. Likewise, the area that was burned to kill back the scrub oak indicates that there are possibilities of setting scrub oak back with fire, but the sprouts that result make it questionable whether there is any real benefit.

On 67 acres of scrub oak with small pines growing in mixture, the scrub oak was removed by cutting in an attempt to favor the young pines.

Sixteen acres of planted slash pine, 9 to 11 years old, were pruned up to about 10' in height. Only the best trees were treated in this manner, leaving the less desirable trees untouched to be taken out at a later thinning operation.



Commercial fertilizers were used on about 15 acres to determine whether there would be any benefit to the planted pine trees by fertilizing them. Areas so treated last year were checked but not enough time has elapsed since the first treatment to notice any marked effect.

Ammate (Ammonium Sulfamate) was used on small plots in both crystal form and as a spray to determine whether or not it is practical for use in killing scrub oaks. Twelve small plots were laid out and were treated monthly, starting in February, 1948, to determine the best time of year for such treatments. These experiments have not been run long enough to draw any definite conclusions, but indications are that both the ammate crystals and the spray can be used to kill scrub oak.

On 11 acres the scrub oak was cut down by hand, piled and burned, stumps were pulled with tractors, and then the whole area was plowed with an Athens 26" firebreak plow. This area was then planted with slash, loblolly, and longleaf pine. Various treatments were given on small plots within the area planted to each of the three species of pine as follows:

- Peas planted between rows of pines.
- Pines mulched with pine straw.
- Commercial fertilizer applied.
- Composts applied.

Here, too, it is too early to draw any conclusions but the survival of slash and loblolly pines is very good and the survival of longleaf pine is very poor.

During the early summer of 1948, work was started to prepare additional areas for planting by eliminating or reducing scrub oak naturally on the land. Six additional acres were worked by hand with the scrub oak cut down, piled, and burned. A Marden Duplex Brush Cutter, which is a machine similar to but much larger than the cotton stalk cutter, and with two drums instead of one, was purchased and used successfully in clearing areas of scrub oak and other growth. Thirty acres were treated with the brush cutter before the end of the year. After the area is gone over with the brush cutter, the Athens firebreak plow is then used to turn up roots. These areas and additional areas prepared during the next year will be planted to slash and loblolly pine seedlings during the 1948-49 planting season.



### **Maintenance and Repair:**

Considerable work was done at Sugar Loaf Mountain Recreational Area. Tables and benches at the picnic shelters were repaired and rotten planks replaced, signs repaired and replaced where necessary, and the undergrowth on the Dam along the lake in front of the picnic shelters was cleared out.

At the Campbell's Pond Negro State Park logs and trash were cleaned out of the spillway and repairs were made to the flash board on the large spillway.

Considerable work was done at forest headquarters in repairing buildings.

Maintenance work was also done on nine tenant houses.

Eight major and thirty minor repair jobs were done on the forest trucks, pickups, and tractors during the year.



**Summer forestry campers at Cheraw State Park learn dibble planting in order to be ready for planting season.**



## PUBLIC RELATIONS

It is recognized that by itself the State Commission of Forestry can never achieve full production from South Carolina's woodlands. It requires the active support of everyone in South Carolina to achieve this most desirable goal. It has been estimated that on the average South Carolina's woodland produces only about one-third of its potential capacity. Through the education of the public to the need for forest fire protection, planting of areas that will not reseed themselves naturally, and wise cutting of existing timberlands full production of our woodlands can be realized. Furnishing information on woodland management and forest fire control is one of the most important functions of the Commission. This program needs to be expanded in order to make every person in South Carolina informed on all phases of forestry. Many activities of an educational nature are carried on by the Commission of Forestry.

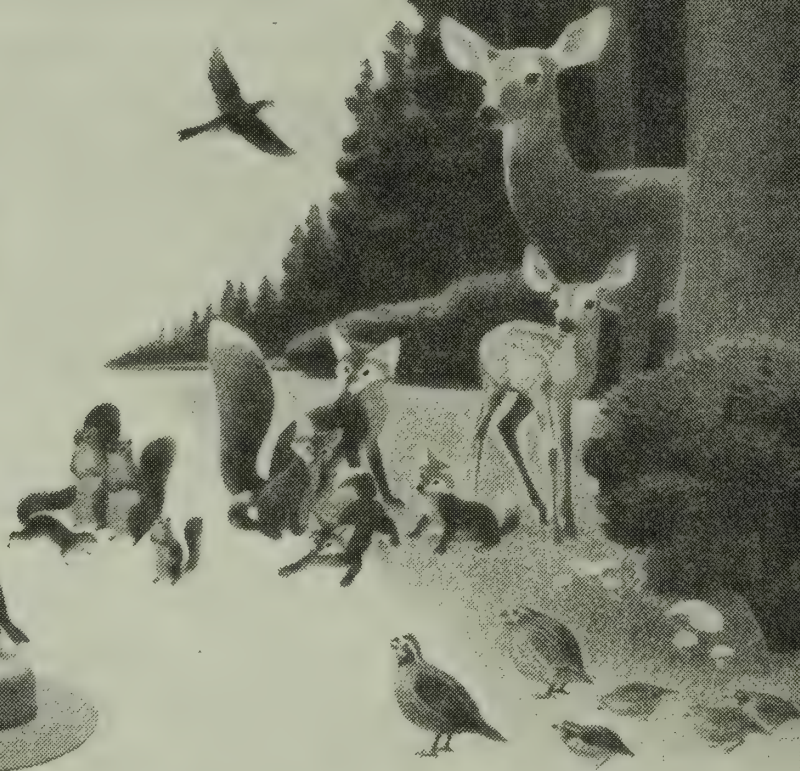
### COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The Cooperative Forest Fire Prevention Campaign continued as a major activity of the Commission of Forestry. This campaign was, in South Carolina, a part of a national movement to prevent the destruction of forest fires. Materials used were prepared as a public service feature by the Advertising Council, Inc. These materials were prepared for use by the Commission of Forestry and other cooperating agencies in the state. These agencies include the U. S. Forest Service, the Clemson Extension Service, and the American Red Cross.

Newspapers, radio stations, schools, churches, and other organizations cooperated in the dissemination of these materials. This campaign supplemented the regular program of forest fire prevention that the Commission of Forestry has been carrying on for many years. It was through this campaign that radio platters, full color posters, pamphlets, bookmarks, blotters and other additional materials were provided the Commission for distribution. The slogan carried on all of this year's material was "Remember—Only You Can Prevent Forest Fires!"



...and please make  
people careful. amen



*Remember - Only you can*  
**PREVENT WOODS FIRES!**

The theme expressed by this poster was carried on book marks, blotters, lapel buttons and other media for this year's Cooperative Forest Fire Prevention Campaign.



The following table shows the distribution of these materials.

Distribution of Fire Prevention Materials

Posters .....	26,844
Leaflets and pamphlets .....	27,676
Stickers and stamps .....	399,525
Bookmarks and blotters .....	381,295
Other prevention materials .....	47,698
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Total .....	883,038

**FORESTRY QUIZ CONTEST**

The forestry quiz contest was held in 1,892 schools in the state last year before an audience of more than 153,244 students and teachers. Questions used in the contest related to forest fire control, forest management and utilization, reforestation, and state parks.

On completion of the school contests, finals were held in all counties in order to determine county winners for both white and colored pupils. White county winners in each of the Forestry Commission's seven districts then competed in district finals, usually held over a radio station within the district. The winners of the district finals participated in the state forestry quiz finals held over station WIS in Columbia on May 1. The winner of the state final was John E. Langley of Edgefield High School who was awarded first prize of \$15.00. Other winners were Charles Chitty, Jr. of Olar High School, second prize of \$10.00; Bobby Mears of Ridgeland High School, third prize of \$5.00; and consolation prizes of \$3.00 each were awarded Jerry Gray of Oates High School; Ruth Mann of Pickens Elementary School; James Melton of Gable High School; and William G. Moore of Sherwood High School.

**Quiz Contests**

	Number of Contests	Total Attendance
Aiken District .....	193	20,554
Camden District .....	315	24,886
Florence District .....	319	27,426
Kingstree District .....	153	16,534
Newberry District .....	369	25,154
Spartanburg District .....	421	22,586
Walterboro District .....	216	16,104
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Total .....	1,986	153,244





State winner E. B. Hare of Oconee County and grandson Hubert Smith show the State Judges of the 5-Acre Pulpwood Thinning Contest the effect of this fine example of thinning. From left to right: Extension Director D. W. Watkins, Mr. Hare and Hubert, Howard Doyle, representing the Southern Pulpwood Conservation Association and State Forester C. H. Flory.

### THIRD ANNUAL PULPWOOD THINNING CONTEST

For the third year the five-acre pulpwood thinning contest was sponsored by the S. C. State Commission of Forestry and Clemson College Extension Service in cooperation with the International Paper Company, West Virginia Pulp and Paper Company, Union Bag and Paper Company, and Champion Paper and Fibre Company. These mills depend wholly or in part on wood grown in the state, and contributed the prizes awarded.

This contest was designed to encourage farmers to thin their young pine stands for pulpwood with their own labor during slack seasons. It was open to competition from September 1 through March 15. The five acre plots were judged on proper selection of trees, cutting of low stumps, proper utilization, prevention of damage to other trees, protection of the woods from fire, cutting of inferior species, and records of actual work done on the project.



Winner of the 1947-48 contest was Mr. E. B. Hair of Oconee county, who was awarded the state prize of \$250.00. For convenience, Clemson College Extension Service Districts were used in judging. The three district winners were: Aiken District, Mr. E. P. Boazman of Greenwood County; Florence District, Mr. A. M. Crouch of Marlboro County; and Spartanburg District, Mr. C. M. Leonard of Kershaw County. Each of these district winners received a \$125.00 district prize. In addition there were prizes awarded to nineteen county winners of \$25.00 each.

### **TOWERSITE BEAUTIFICATION CONTEST**

An annual event, the towersite beautification contest is sponsored by the Commission of Forestry for the benefit of its one hundred and thirty-four forest fire detection towers. Since many of the improvements to structures and grounds are accomplished by the towerman himself, the contest is designed to stimulate his interest in his land and his live-at-home program. Each tower is judged on the basis of the work done during the year toward that end.

All South Carolina tower units contain a small subsistence area used by the towermen for production of food and feed. Despite the fact that many of the subsistence areas were low in fertility, all towermen were able to grow at least some of the food needed at home. Soil building practices and the development of better livestock and poultry breeds are encouraged by the Commission. The contest stimulates much interest in developing a beautiful and useful tower unit. Many repairs to buildings and other improvements are made by the towermen and their families. Most of the landscaping is done by them. Assistance is given in planning such improvements. In the larger jobs of maintenance and construction district office personnel and unit personnel assist the towermen in developing their tower units. At the end of the contest period, May 31, all tower units in South Carolina are inspected and graded.

This year the following winners were selected: R. C. Timmerman, towerman at Epworth Tower in Greenwood County, was judged first prize winner; Joe Billy Posey, towerman at Craytonville Tower in Anderson County, won second prize; followed by Laurin Sessions, towerman at Tyson Tower in Georgetown County, third place; and J. E. Franklow, towerman at Lake Murray





**Towersite Beautification Contest winner R. C. Timmerman and family at Epworth Tower in Greenwood County developed an excellent live-at-home and beautification program.**



Tower in Lexington County, fourth place. Each of these towermen also won first district prize in the contest for the forestry district in which the towers are located.

Other district prize winners were: E. B. Wilson, Towerman at Philadelphia Tower in Darlington County, first Florence District prize; Clyde H. Smoak, Towerman at Stokes Tower in Colleton County, first Walterboro District prize; H. T. Hornsby, Towerman at Blaney Tower in Kershaw County, first Camden District prize. District second prizes were awarded to: D. S. Robinson, Towerman at Simpson Tower in Fairfield County, Newberry District; Ed Bradshaw, Towerman at Montclare Tower in Darlington County, Florence District; Mrs. Annette E. Jacobs, Towerman at Pritchardville Tower in Beaufort County, Walterboro District; Mrs. W. W. Watts, Towerman at Sampit Tower in Georgetown County, Kingstree District; Mrs. R. C. Condrey, Towerman at Rosemary Tower in Sumter County, Camden District; Mrs. Isabell Edwards, Towerman at Rowesville Tower in Orangeburg County, Aiken District; and J. A. Sherbert, Sr., Towerman at Hobbeyville Tower in Spartanburg County, Spartanburg District.

### CONSERVATION WEEK

The week of November 30-December 6 was proclaimed Conservation Week, and Friday, December 5 Arbor Day by Governor J. Strom Thurmond. It is recognized that the conservation of our natural resources must be practiced every day during the year, but Conservation Week is especially set aside for bringing to our attention the many problems that must be solved in order to achieve the wisest use of our resources.

The Garden Club and the Federated Women's Club of South Carolina sponsored the observance of this period with the Commission of Forestry. The Clemson College Extension Service, the U. S. Forest Service, the Soil Conservation Service, the State Department of Education, the press and radio are among the many groups cooperating in placing the problem of conservation before the people of South Carolina.

Fifty thousand copies of a special issue of "Forestry and Park Notes" were used with other material prepared by the Commission by many organizations throughout the state in developing their Conservation Week and Arbor Day programs. The



Clemson College Extension Service and the Commission of Forestry arranged for the planting of many forest tree seedlings on Arbor Day. A summary of Conservation Week activities follows:

### Conservation Week Activities

	Number of Groups Participating	Number of Indi- viduals Attending
Aiken District .....	124	13,170
Camden District .....	154	11,188
Florence District .....	117	5,178
Kingstree District .....	81	13,708
Newberry District .....	212	11,221
Spartanburg District .....	353	18,398
Walterboro District .....	97	9,789
Total .....	1,138	82,652



"Dead Out", an educational motion picture in color was produced by the forestry departments of the Southern States and the U. S. Forest Service. Most of the scenes were taken in South Carolina.



## MOTION PICTURES

As an important medium for the dissemination of forestry information the Commission operated a motion picture unit which was staffed by a technical forester. This unit moved about from one district to the other according to schedules prepared by the district foresters. Films relating to forest fire control, forest management, utilization, reforestation and other forestry subjects were shown to such groups as schools, churches, civic organizations, community gatherings, logging camps, woodland owners and fire control training groups. This unit was in operation for only part of the year because of the lack of personnel.

The number of showings and attendance by districts is shown below:

### Motion Picture Showings 1947-48

	Number of Showings	Total Attendance
Aiken District -----	69	5,148
Camden District -----	173	11,213
Florence District -----	104	7,283
Kingstree District -----	73	7,049
Newberry District -----	69	3,839
Spartanburg District -----	57	3,315
Walterboro District -----	79	4,711
	<hr/>	<hr/>
Total -----	624	42,558

## VOCATIONAL AGRICULTURE SCHOOL FORESTS

In cooperation with the Division of Vocational Agriculture of the State Department of Education, the State Commission of Forestry carried on the work of school forests which have been in operation for many years. These school forests serve as out-of-door classrooms for many vocational agriculture students. The vocational agriculture teacher and the district forester work out plans that will be carried out on the school forests each year and in connection with home projects which the boys themselves develop on their own farm. Good principles of forestry are learned in the classroom, on the school forest, and are carried to the boy's homes.





Vocational agriculture students study forestry on the ground. This class at Lake View High School in Dillon County is thinning and estimating young timber on their school forest.

Cleveland High School at Madison in Oconee County and Walterboro High School in Colleton County were awarded first place prizes for having the best school forests in the up-state and lower-state areas respectively. Second place prizes went to Jonesville High School in Union County and Cross High School in Berkeley County.

Thirty-nine schools participated in this program during the year. Those schools in which a major portion of the program was completed were:

Aiken District: Monetta, Langley-Bath-Clearwater.

Camden District: McBee, Camden, Heath Springs, Ashwood, Dentsville, Sherwood, and Edmunds.

Florence District: Lamar, Dillon, Latta, Lake View and Conway.

Kingstree District: Cross, Berkeley and Manning.

Newberry District: Chester, Edgefield and Stoney Hill.

Spartanburg District: Cleveland, Jonesville and Pendleton.



Walterboro District: Bluffton, St. Johns, Walterboro, Harleyville and Ridgeland.

Working in close cooperation with the State Commission of Forestry and others. Prof. F. E. Kirkley of the Agricultural Education Department of Clemson College prepared a publication entitled "Farm Forestry Practices for Students of Vocational Agriculture" which was published by the State Department of Education. Copies were made available to every vocational agriculture student and teacher and every veteran teacher and student participating in the farm veterans program. Strong evidence has already been demonstrated that this publication will do much to develop the interest of high school and farm veteran students in forestry.

### RESOURCE USE EDUCATION

The development of concern about the natural resources of the state has shown a steady increase over the years. School



Children learning that pine cones bear the seed that one day will become our timber supply. Resource use education is extended our youngest citizens in day camps held at our state parks.



teachers, administrators and other pre-college educators have individually and in certain groups called on non-school agencies for assistance in teaching conservation. The teachers and administrators of Vocational Agriculture have demonstrated this interest by fostering the establishment of school forests in co-operation with the State Commission of Forestry.

On October 18, 1947 the Walterboro District conducted a one-day workshop in the woods for forty teachers of Vocational Agriculture. This meeting brought practical on-the-farm forestry to teachers who had not had the opportunity of learning it through school forests as well as a few who had. The enthusiasm demonstrated at this meeting encouraged the Vocational Agriculture Division to make plans for similar meetings next year for all farm veterans teachers as well as all regular vocational agriculture teachers in the state. Courses of instruction will be taught by district foresters at these meetings.

For the first time the State Commission of Forestry was asked this year to send a representative to the Southern States Work Conference for pre-college educators held annually at Daytona Beach, Florida. The purpose of the largest committee formed at this ten day meeting was to study ways and means for the development of concern among educators about natural resources.

Two other conferences were planned for teachers in South Carolina to be held after the close of the fiscal year covered by this report. This development promises to bring needed attention to conservation from more people in the future. Educational leaders are becoming more and more aware that it is job for everyone.

## TALKS

The personnel of the S. C. State Commission of Forestry welcomed the numerous requests for talks received from schools, civic organizations and other groups. Talks made by the personnel related to the various phases of forestry and state park work of the Commission. During the past year a total of 2,529 talks were made by Columbia office, district and county personnel before 148,484 persons. The following table shows the division by districts and Columbia office.



	Number of Talks	Total Attendance
Aiken District .....	414	31,698
Camden District .....	545	33,688
Florence District .....	311	9,428
Kingstree District .....	208	18,561
Newberry District .....	205	5,325
Spartanburg District .....	218	13,083
Walterboro District .....	565	29,441
Columbia Office .....	63	7,260
Total .....	2,529	148,484

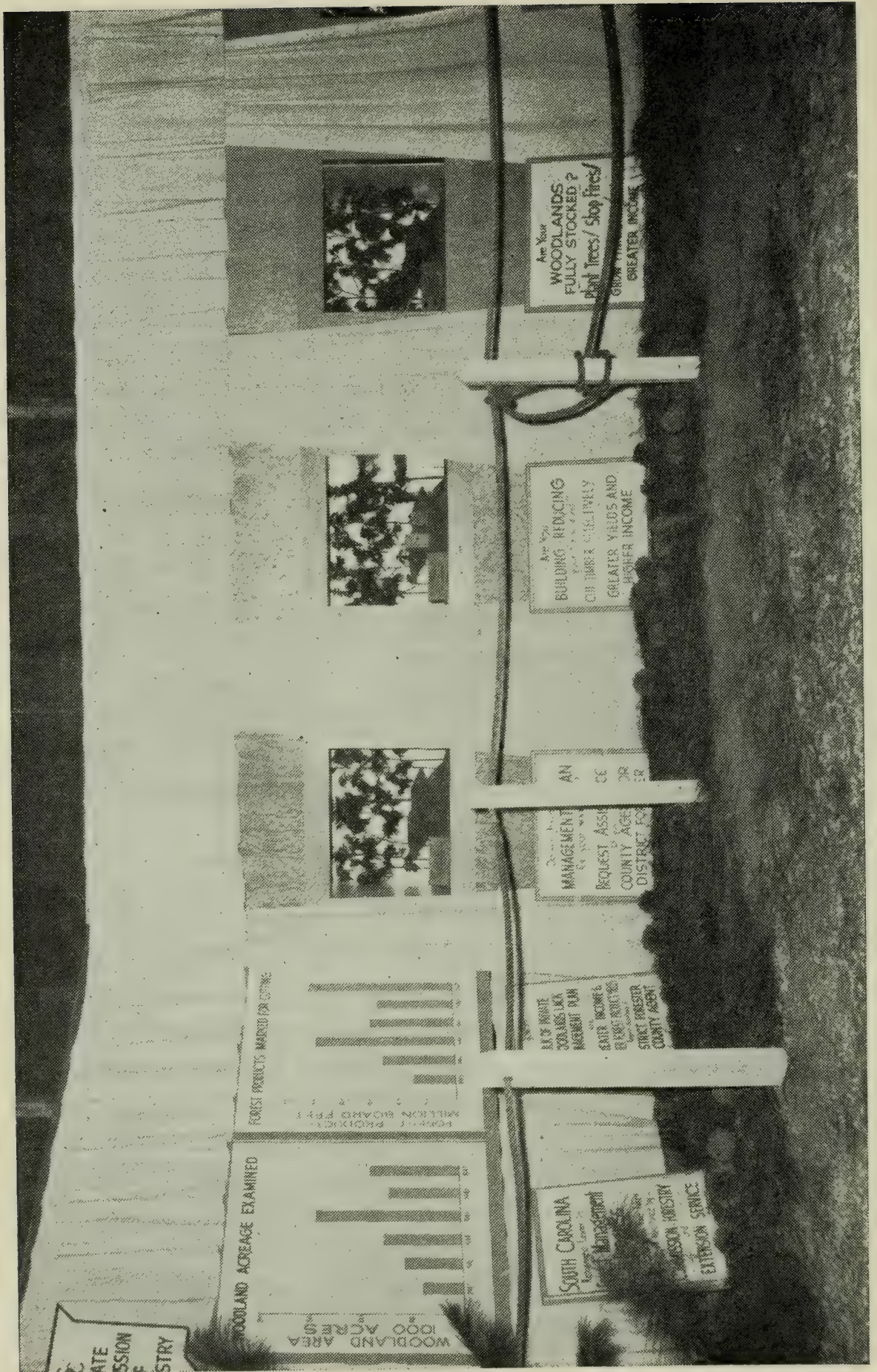
## RADIO

Radio has proven to be a valuable aid in the dissemination of forestry information to the people of the state. During the past year greater use than ever before was made of this medium. Platters, spot announcements, prepared scripts, short informational talks and discussions, and forestry quiz contests were presented. The radio stations in and adjacent to the state were very cooperative in presenting forestry information over the air.

## EXHIBITS

In addition to the exhibit placed at the State Fair in Columbia for white and colored groups by the Commission of Forestry, exhibits were prepared for twenty-two white and colored county fairs. These exhibits were viewed by some 420,000 persons. The Camden District presented floats at Christmas parades in both Camden and Sumter with an estimated attendance of 29,000 persons. The Spartanburg District entered a float in the Walhalla Christmas parade attended by some 8,000 persons. Two effective window displays were prepared by the Walterboro District for Varnville and Walterboro. Types of exhibits and estimated number of persons who viewed each exhibit is given in the following table.







## Record of Exhibits

LOCATION OF EXHIBIT	TYPE OF EXHIBIT	Estimated Attendance
Conway .....	Log Volume and Value Exhibit .....	12,000
Union .....	Photo Murals—Fuelwood Cutting .....	11,000
Manning .....	Photo Murals—Reforestation .....	5,000
Camden .....	Photo Murals—Firebreak Project .....	8,000
Bishopville .....	Photo Murals—Firebreak Project .....	6,000
Rock Hill .....	Log Volume and Value Exhibit .....	15,000
Anderson .....	Photo Murals—Timber Marking Project .....	40,000
Chester .....	Photo Murals—Fuelwood Cutting .....	5,000
Chester (Colored) .....	Photo Murals—Fuelwood Cutting .....	3,000
Newberry .....	Photo Murals—Protected Woodland .....	15,000
Lancaster .....	Photo Murals—Firebreak Project .....	6,000
Lancaster (Colored) .....	Photo Murals—Firebreak Project .....	8,000
Walhalla .....	Management Dioramas .....	8,000
Manning .....	Photo Murals—Timber Marking Project .....	8,000
Florence .....	Photo Murals—Firebreak Project .....	30,000
Marion .....	Photo Murals—Fuelwood Cutting .....	10,000
Charleston .....	Photo Murals—Protected Woodlands .....	55,000
Sumter .....	S. C. Forestry Progress (1927-47) .....	10,000
Sumter (Colored) .....	S. C. Forestry Progress (1927-47) .....	7,000
Walterboro .....	Photo Murals—Protected Woodland .....	10,000
State Fair .....	S. C. Forestry Progress (1927-47) .....	82,000
State Fair (Colored) .....	S. C. Forestry Progress (1927-47) .....	18,000
Spartanburg .....	Forest Fire Control Exhibit .....	40,000
Loris (Farmer's Exposition) .....	Log Volume and Value Exhibit .....	8,000
TOTAL .....		420,000

## SOUTHERN STATES PUBLIC RELATIONS CONFERENCE

This year Public Relations chiefs of State Forestry Agencies of thirteen southern states met in May with State Foresters and Forest Fire Control chiefs for a four-day conference in Georgetown, S. C.

Significant headway was made toward cooperative projects which would reduce the unit cost of certain educational materials.

Prior conferences of this group bore fruit this year with the production of the excellent film on fire prevention, "Dead Out". Some eighty percent of this production (in sound and color) was filmed in South Carolina (Newberry and Columbia areas).

Proposed at this conference were a similar film dealing with forest management and several educational leaflets.

Visiting delegates were quite obviously impressed with the development of forestry in South Carolina. One phase of public relations work drawing considerable favorable comment was the extent and scope of training of field personnel in educational activities.

## TRAINING

At the state training meeting of technical personnel and unit rangers previously referred to in the fire control section of this



report considerable emphasis was placed on training in educational activities. All phases of public relations work were covered by instruction and demonstration. Individuals were then given the opportunity to put what they learned into practice. For example, two-minute talks were made by trainees to the group. These were followed by constructive criticism in which everyone took part.

Follow-up training periods for unit personnel extended this training to all fire control forces in each county.

### PUBLICATIONS AND POSTERS

Many requests for informational literature are received by the Commission each year. Through its branch of public relations, literature on the many subjects of forestry, including forest fire protection, management and utilization, and reforestation are made available on request at no cost. These publications are prepared and printed by the Forestry Commission and by the several public and private organizations doing Forestry work in South Carolina. The Commission also maintains a supply of descriptive literature on state parks and facilities.

Literature is distributed by mail from the Columbia office and in person by the personnel of the district and unit rangers' offices throughout the state. Fifty thousand copies of each of two issues of "Forestry and Park Notes" were distributed throughout the state. This publication is devoted to forestry and park information of general interest and is prepared by the State Commission of Forestry. The Commission also cooperated in the preparation of the publication entitled "Farm Forestry Practices for Students of Vocational Agriculture" prepared by Prof. F. E. Kirkley of the Agricultural Education Department of Clemson College.

To supply the tremendous demand for the publication "Junior Forestry Notebook" the Commission reprinted 23,500 copies for distribution to schools in the state. Several industrial firms contributed funds for the printing of 8,900 copies of this publication. These firms and the number of copies provided are:

Lightsey Brothers Lumber Company .....	1,400
West Virginia Pulp and Paper Co. ....	2,500
International Paper Company .....	2,500
Champion Paper and Fibre Company .....	1,000
Brooks-Scanlon Lumber Company .....	1,500



The State School Book Commission cooperated again with the Commission of Forestry in the preparation and distribution of 750,000 textbook covers for the use of school children in South Carolina.

#### **Distribution of Literature, etc.**

Posters .....	17,035
Bulletins and Leaflets .....	300,000
Book Covers .....	750,000
Total .....	<hr/> 1,067,035

#### **NEWS RELEASES AND ARTICLES**

In order to keep the landowners of the state and the general public informed on the forestry and state park problems in South Carolina many releases were furnished the newspapers throughout the state. Feature articles were also prepared on special request. The cooperation of the press and radio has contributed widely to the advancement of forestry and park activities in South Carolina.

A total of 717 news releases were prepared by district office personnel and unit rangers and distributed to the papers in the counties in which they work. An additional 69 releases were prepared by the Columbia office and were distributed to all newspapers in South Carolina. Many of these releases were also sent to and appeared in out-of-state papers, lumber and forestry journals, and other periodicals. In addition much information was furnished press representatives in oral form which they prepared for publication.

News ads and drop-in mats were used in many newspapers throughout the state in connection with the Cooperative Forest Fire Prevention Campaign.

#### **SIGN AND WOODWORKING SHOP**

The sign and woodworking shop located at the work center at Sumter and staffed by a foreman and a helper is continuing to render valuable service by producing signs and doing necessary cabinet work for all branches of the Commission.



During the year over three hundred routed letter signs of various types were produced at the shop. The routed letters of these attractive signs are cream against a background of burnt umber. The juniper lumber used in building the signs was produced on Poinsett State Forest. This material is easy to work and resistant to decay which permits rapid production of quality signs.

This uniformity of the signs, placed at state forests, state parks and other Commission installations, enables the public to easily identify the project with the Commission of Forestry. The signs tend to give our state forests and parks greater educational value as well as making them easier to use.

Observers from other states have commented that South Carolina has the best forestry and parks sign system in the South.

In addition to signs and cabinet work, the shop personnel and equipment were of invaluable assistance in the production of state and county fair exhibits.

### **SOUTH CAROLINA TREE FARM SYSTEM**

In order to recognize the many landowners in the state who are practicing good forestry the South Carolina Tree Farm System was set up to certify deserving landowners as members. Certificates of merit were awarded ten landowners in South Carolina this year in recognition of sound forestry practices carried on on their land. In order to qualify, a landowner must prevent woods fires and take all reasonable precautions against them. In addition he must apply sound cutting practices to existing timber and must plant areas that normally will not become restocked naturally.

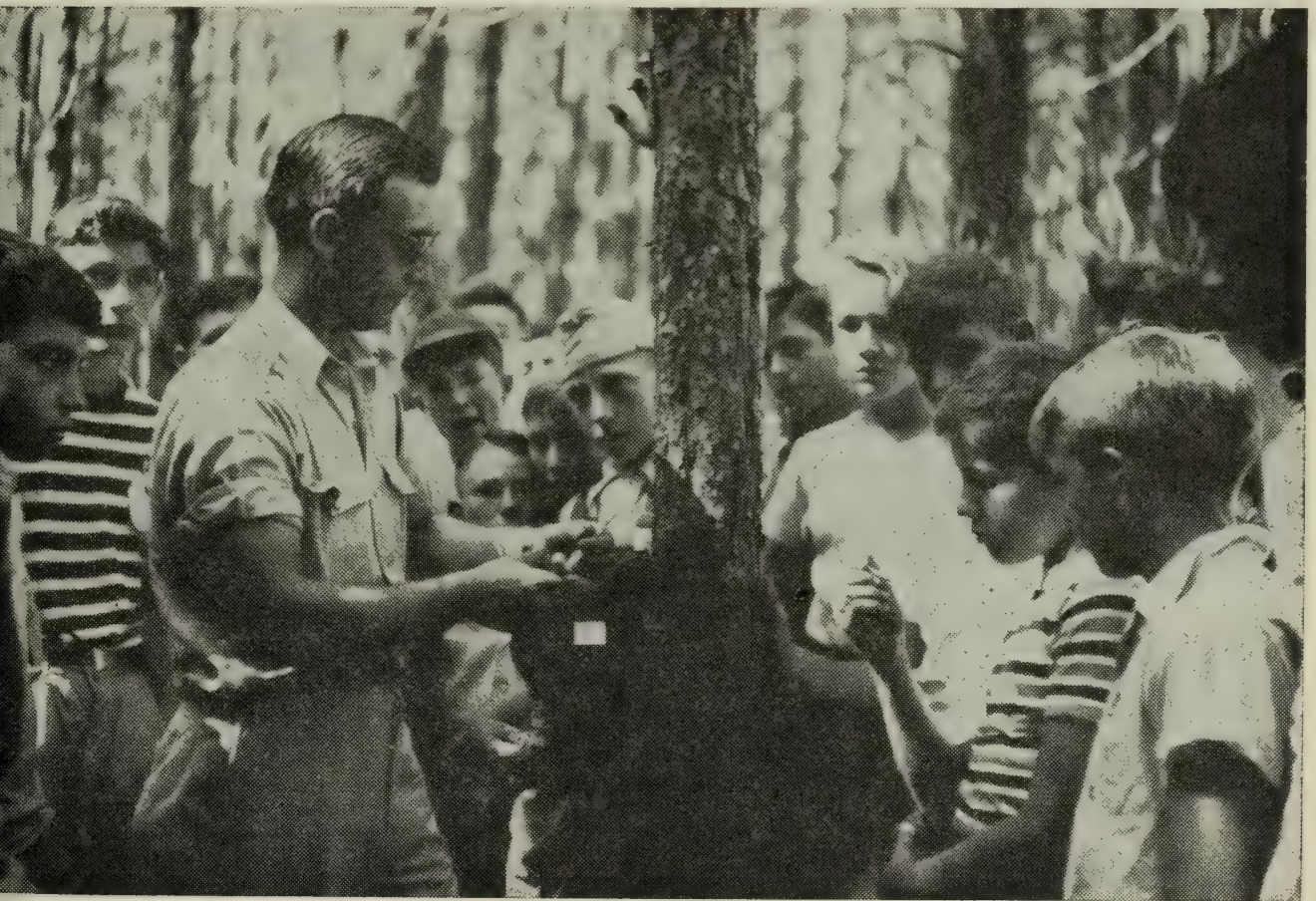
This movement is sponsored in South Carolina by the Commission of Forestry and the Clemson College Extension Service. Before a landowner may be certified his application must pass the County Tree Farm Committee. This committee is made up of the district forester, the county agent and a member of the County Forestry Board. After clearing this committee the application is referred to the State Committee which takes final action on the application. The State Tree Farm Committee is made up of influential citizens in South Carolina interested in the advancement of forestry. Members of the State Committee



are: Mr. Tom Moore Craig of Moore; Mr. James H. Graham of Charleston; Mr. C. P. Key of Lodge; Mr. Oswald Lightsey of Miley; and Director of Extension D. W. Watkins of Clemson. Assistant State Forester John C. Witherspoon is secretary to the state committee. Landowners who have qualified under the S. C. Tree Farm System and who have been awarded certificates this year are as follows: Frank E. Timmerman of Edgefield county; Joe L. Tolbert of Greenwood county; Pegues Family of Marlboro county; F. E. Coxe of Marlboro county; Mrs. H. L. Tilghman of Marlboro county; A. H. Rogers and son of Darlington county; Benton D. Dargan of Darlington county; S. B. Huff of Greenville county; G. L. Williamson of Florence county; and H. B. McCall of Florence county. The acreage represented by these certifications totals 25,875 acres.

### FORESTRY CAMP

The second annual forestry camp for boys was held by the Forestry Commission during the period July 28-August 2, 1947,



Boys at the 1947 Forestry Camp study ways to determine tree growth.



at Camp Juniper, Cheraw State Park. Forty-six boys devoted a week to the study of forest fire control, forest management, reforestation and state parks. Each county in the state was represented by one boy chosen by lot from those writing letters to their unit ranger.

Classes in forestry were interspersed with organized recreation and it was evident that the entire program was thoroughly enjoyed.



Hunting Island State Park is characterized by rest and quiet.



## STATE PARKS

South Carolina State Parks were again used at a record breaking rate for the year ending June 30, 1948. Attendance figures exceeded 1,500,000.

Activities other than picnicking and swimming conducted during the year were lifesaving classes, learn-to-swim classes, camp leaders' training schools, day camps and special tours and events such as the Easter Sunrise Services, Fall Festival Tour and Laurel Festival. Plans were made to acquire new park areas at Clarks Hill, Camp Croft and Fort Moultrie. During the year park roads were paved at Cheraw and Sesqui-Centennial and the access road to Poinsett was surfaced.

The \$120,000.00 maintenance and repair program was successfully concluded and all parks benefited greatly in appearance and structurally through these funds.

Twenty trailer vacation cabins were added at popular Myrtle Beach and received maximum use throughout the summer.

Electric stoves and refrigerators were purchased and installed at Oconee State Park's twenty vacation cabins and at five cabins at Givhans Ferry.

Construction was initiated on the beautiful new bathhouse at Spartanburg State Park. It is now complete. Construction was started on three new cabins at Table Rock and they were completed. Construction was initiated on the new picnic shelter at Sesqui-Centennial and it is now completed.

Two family cabins at Edisto were moved from the beach proper and re-erected at George's Point area for safety.

Construction of the bathhouse, beach, water system, picnic tables, and latrines was initiated on the colored park at Poinsett and is now complete.

Receipts were \$73,611.28, which represented a drop from the previous year and was due to leasing out of refreshment stands in all parks. Actual net revenue for the state remained the same, however.

Nineteen State Parks and five waysides are located as follows:





Divers find "good water" at Table Rock and other state parks.

NAME	ACREAGE	LOCATION
Aiken .....	867	Aiken County
Barnwell .....	252	Barnwell County
Cheraw .....	7,361	Chesterfield County
Chester .....	523	Chester County
Edisto Beach .....	1,255	Charleston County
Givhans Ferry .....	1,235	Dorchester and Colleton Counties
Greenwood .....	1,114	Greenwood County
Hunting Island .....	5,000	Beaufort County
Kings Mountain .....	6,141	York and Cherokee Counties
Lee .....	2,839	Lee County
Myrtle Beach .....	323	Horry County
Oconee .....	1,165	Oconee County
Paris Mountain .....	1,275	Greenville County
Poinsett .....	1,000	Sumter County
Rivers Bridge Conf. Memorial .....	390	Bamberg County
Sesqui-Centennial .....	1,500	Richland County
Santee .....	2,364	Orangeburg County (being developed)
*Spartanburg (new park) .....	47	Spartanburg County (being developed)
Table Rock .....	2,860	Pickens County
TOTAL .....	37,511	

\*Negotiation for acquisition of 7,002 acres additional now underway.



NAME	ACREAGE	LOCATION
Aiken .....	35	Aiken County
Colleton .....	35	Colleton County
Greenville .....	63	Greenville County
Greenwood .....	30	Greenwood County
Kershaw .....	31	Kershaw County.
TOTAL .....	194	

## OPERATION AND MAINTENANCE

A detailed listing of repairs and improvements follows:

### Aiken State Park

Beach renovated; picnic tables completed; electric hot water heater installed in superintendent's residence; barn covered and converted to work house, garage and storage house; boat landing repaired; bathhouse floor repaired; diving board erected and dock repaired; shrubbery planted at superintendent's residence; bathhouse wired; superintendent's residence covered; chicken house covered and converted to storage house; all buildings repaired and painted; and fire breaks plowed.

### Barnwell State Park

Two 60 ft. spillways repaired; dam across stream below spillways repaired; two wells drilled; five picnic tables replaced; porch floors of two dwellings painted; all garbage cans and boats painted; all picnic tables painted; lights in picnic area near spillways installed; bathhouse painted inside and out; electric refrigerator, stove, deep fat fryer installed at Recreation Building; pump ordered; truck replaced; and fire breaks plowed.

### Cheraw State Park

All buildings on public use side of park, all buildings at Camp Juniper, and two units and main buildings at Camp Forest painted; bathhouse, recreation building and family cabins re-roofed; renovation of Park Ranger's house, which included re-roofing, painting (inside and out), installation of hot water system and re-landscaping of front yard; two sets of rock pillars built at the entrance to group camps and swimming area; pressure water system replaced at Campbell's Pond Colored Park; stables for five horses built (scrap lumber); termite





Boating is popular at Lee State Park.



shields installed under cabins; linoleum installed in cabin kitchens; structural improvements to all buildings with exception of two units at Camp Forest; park road paved; dam at Campbell's Pond Colored Park repaired; flush toilets at Campbell's Pond Colored Park replaced; and fire breaks plowed.

### **Chester State Park**

All buildings painted; park recreation building closed in for use during fall and winter months; park picnic shelter remodeled; two large and three small picnic tables replaced; electric facilities extended to picnic shelter; boats painted; drinking fountain repaired at picnic grounds; hot water tank connected at recreation building; termite shields installed under all buildings; new heads installed on drinking fountains; all picnic tables painted; area between concession building and boat house



Oconee State Parks offers horseback riding as one of its many attractions.



cleared of underbrush; piers replaced at boat house; sewer line at Concession building repaired; five boats replaced; pickup truck replaced; planted 100,000 seedling pines on lake watershed (erosion control); and fire breaks plowed.

### **Edisto Beach State Park**

Two picnic shelters disassembled and stowed under shed at George's Point; two cabins moved and re-erected at George's Point; well driven at George's Point; pump and tank installed at George's Point; water line laid and connected to tank at George's Point; pump house constructed; park cleaned from tide damages; shed repaired at George's Point; water line repaired and re-located at beach—also on causeway; water fountain, showers and toilets repaired; three wells pumped out; wharf repaired; steps replaced in front of bathhouse; five ovens moved from beach; picnic tables repaired; pump house sills and termite shields installed; four boats replaced; and fire breaks plowed.

### **Givhans Ferry State Park**

All cabins wired for electric stoves, refrigerators, and lights; bathhouse and recreation building wired; new power line  $\frac{1}{4}$  mile constructed; septic tank built at superintendent's residence; five boats replaced; raised superintendent's residence 18" and installed termite shields complete, also replaced rotten structural members; raised barn 18" and installed termite shields complete; cabins and superintendent's residence painted; fire breaks plowed; and truck replaced.

### **Greenwood State Park**

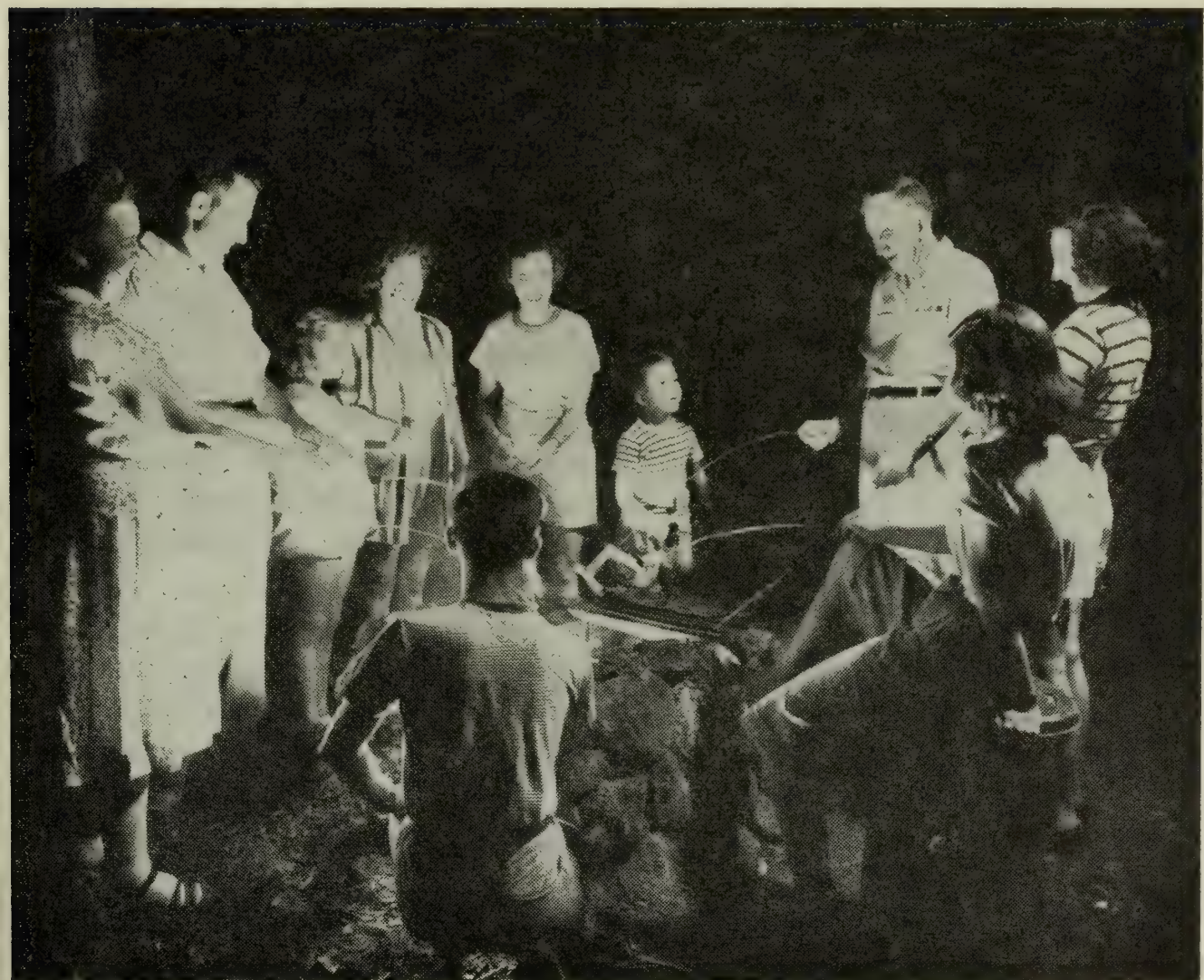
Truck shed replaced; superintendent's residence stained; ten boats replaced; eight picnic tables replaced; general repairs of minor nature completed; fire breaks plowed; six new barges constructed; two pit latrines constructed; temporary bridge constructed; and pickup truck replaced.

### **Hunting Island State Park**

Assistant superintendent's residence completed; all storm damage cleaned up and picnic and bathing area repaired; picnic



shelter disassembled; cast iron lavatories and urinals replaced with vitreous china; signs erected along highway, on beach and picnic area; road to south end of island repaired; Negro beach buildings replaced on foundations and leveled; old foreman's quarters remodeled and repaired; twenty picnic tables replaced; old picnic tables repaired and painted; fire breaks plowed; lighthouse door and lock repaired; new packing installed in water pumps; lifeguard stands replaced; garbage cans painted and placed; concession building in white area disassembled; stumps and roots cleared away in white beach bathing area; weeds and rubbish cleared away in utility yard area; main water tank chipped and painted; and broken glass replaced in lighthouse windows.



When it is too late to swim wiener roasts attract family groups at Myrtle Beach State Park.



### **Kings Mountain State Park**

*Camp Cherokee:* Structural improvements and repairs to all buildings; campers' cabins wired for lights; all buildings painted; toilet seats replaced; water tank cleaned, repaired and painted; shower heads, window panes and screens replaced.

*Camp York:* Structural improvements and repairs to all buildings; installation of safety valves on hot water system; all buildings painted; and water tank repaired and cleaned.

*Service Area:* New well drilled; tank and tower re-located; floors of superintendent's residence sanded and refinished; and three-quarter mile REA line constructed.

*Day Use Area:* Bathhouse wired; picnic shelter wired; and pickup truck replaced.

### **Lee State Park**

New telephone line staked out; water system repaired at superintendent's residence; superintendent's residence re-roofed and painted; all park structures painted and structural repairs made; pickup truck replaced; five picnic tables replaced; five boats replaced; fire breaks plowed; and fire tools replaced.

### **Myrtle Beach State Park**

Five cabins painted; structural improvements and repairs made to all buildings; commode seats replaced; fuse boxes replaced by breaker boxes; bathhouse showers and rest rooms painted; plumbing repaired; interior bathhouse varnished; superintendent's residence painted inside, floors refinished, linoleum installed in kitchen; breaker box installed; lights installed on entrance gates; picnic shelter painted, wiring repaired, flush valves replaced; boardwalk steps replaced, handrails and floor repaired; twenty trailers moved from air base and set up with water and lights connected; five picnic tables replaced; three fireplaces built; all drinking fountains repaired; and latrine built.

### **Oconee State Park**

Bathhouse painted inside and out, duckboards replaced, porch columns repaired; spillway repaired; recreation building sills



replaced, termite shields installed, brick piers installed; all park buildings painted; fourteen cabins re-roofed; pump rebuilt; fire breaks plowed; one hundred boats built to replace old boats in all parks; ten picnic tables replaced; utility building re-roofed; wiring in all cabins replaced and new breaker boxes installed; twenty electric stoves and refrigerators installed in cabins; and minor structural improvements and repairs to all buildings.

### **Paris Mountain State Park**

All buildings except Buckhorn group camp painted; toilet seats replaced; ninety foot footbridge replaced; electric lines repaired; grills repaired; bathhouse painted inside; duckboards replaced; lifeguard stand rebuilt; main sewer line repaired; superintendent's residence re-roofed; heating system installed and insulated; garage re-roofed; laborer's house repaired, porch added and rewired; warehouse sills replaced, pillars and sleepers replaced, loading platform replaced; thirteen boats replaced; and eight picnic tables replaced.

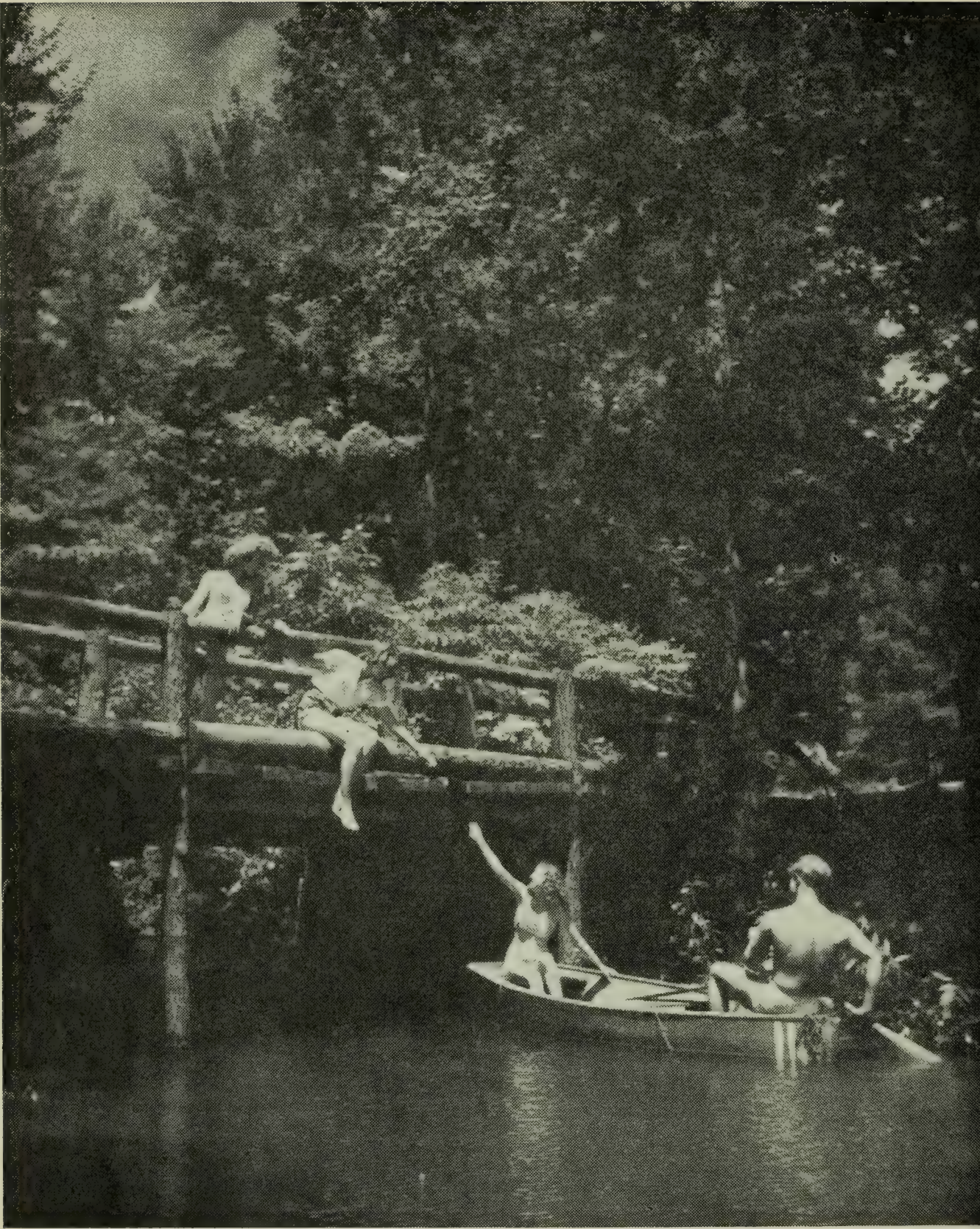
### **Poinsett State Park**

Seventy-five per cent completion of residence for foreman. Structural improvements to bathhouse—decayed sills and siding replaced; complete electrical set—new breaker boxes, heavier wiring, etc. to bathhouse and all cabins; painting of all park buildings; complete power line replacement; repairs to wells; new switches and controls on pump motors; two new concrete footbridges constructed to replace those that were decayed; repairs to small spillway; two water towers replaced; two wash-houses and latrines constructed; repairs to boat dock; eight boats replaced; nine picnic tables replaced; installation of new toilets at Mill Creek; renovation of plumbing at bathhouse and at cabins; and firebreaks plowed.

### **Rivers Bridge Conf. Mem. State Park**

Seven picnic tables replaced and painted; booths whitewashed; women's latrine whitewashed; men's latrine and pump house painted; speaker's stand and three outdoor fireplaces completed; fire breaks plowed; pickup replaced; lights installed at picnic area; grass planted, fertilized; shrubbery and flowers planted.





Visitors provide their own curb service for boats at Table Rock State Park.



### Sesqui-Centennial State Park

All buildings repainted; screens replaced at bathhouse; ten picnic tables replaced; eight boats replaced; major repairs to dam spillways; new picnic shelter started; material for replacement of seats around plaque purchased; plumbing repairs; picnic area wired for lights; roads paved; fire breaks plowed; new picnic area brushed out; mower replaced; and pump overhauled.

### Table Rock State Park

*Lodge*: Doors repaired and refitted, exhaust fan installed; refrigerator replaced, ceiling in kitchen replaced.

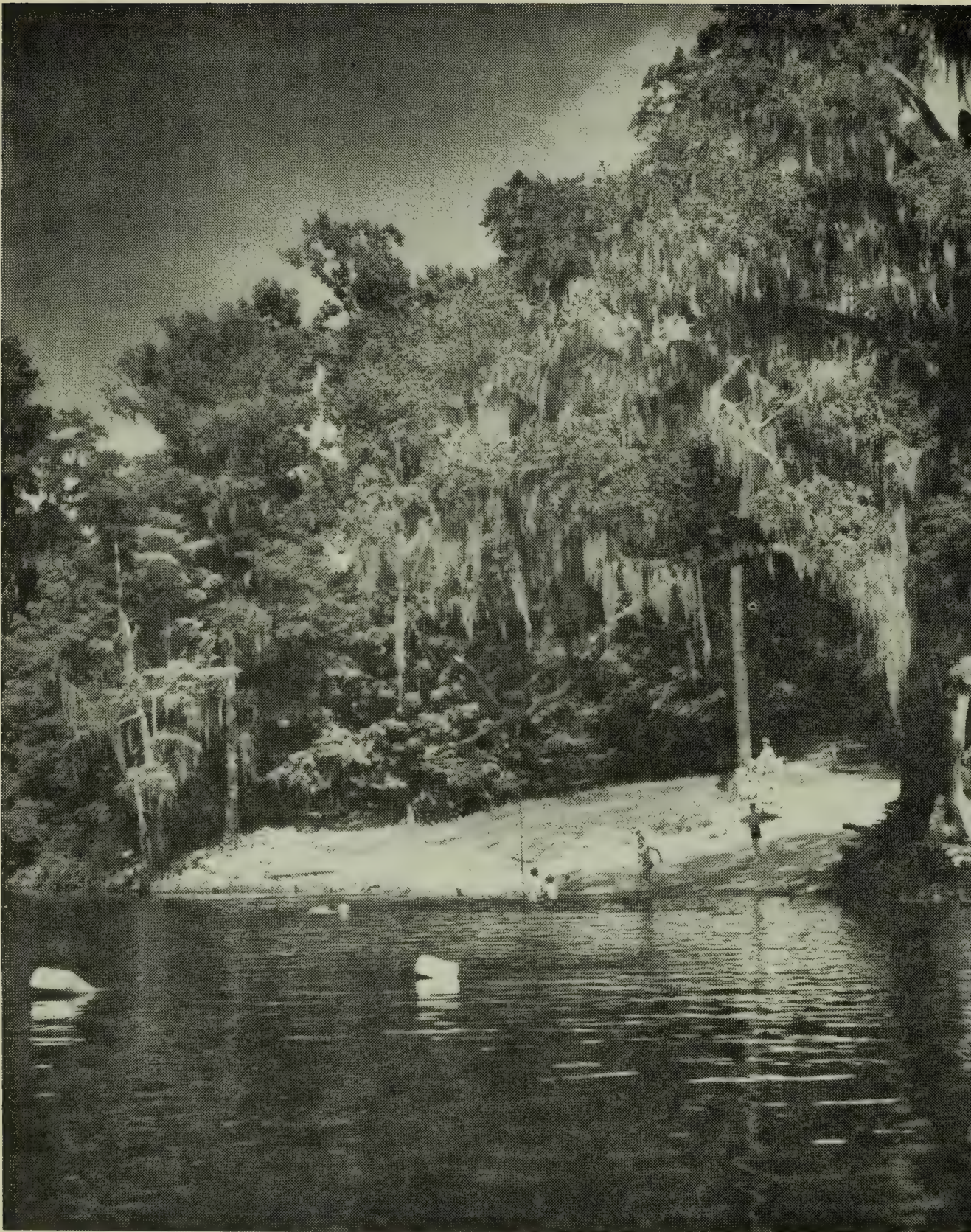
*Superintendent's residence*: Porch sills and flooring replaced, re-roofed, water heater replaced.

All park buildings painted; toilet seats replaced; buoys replaced; four cabins re-roofed; linoleum installed on kitchen floors of all cabins; contract let and construction started on three new family cabins; and structural repairs to all structures.

S. C. State Commission of Forestry  
DIVISION OF STATE PARKS  
Summary of State Park Use, July 1, 1947-June 30, 1948

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathhouse Users	No. Out-of- State Cars	Total No. of Cars	No. Visitors Under 18	Total No. of Visitors
Aiken .....	....	....	910	11,107	7,348	3,308	690	5,332	9,940	23,314
Barnwell .....	....	....	483	20,137	3,576	2,885	284	9,946	11,430	32,715
Campbells Pond (Colored) .....	....	....	14	1,023	5,606	5,214	173	1,652	4,186	10,463
Cheraw .....	838	4,828	1,703	18,429	39,769	20,868	8,686	28,670	61,265	123,058
Chester .....	....	....	477	12,487	....	....	893	16,439	8,447	34,481
Edisto Beach .....	244	1,240	1,627	12,932	9,353	3,216	852	5,192	15,204	26,132
Givhans Ferry .....	154	638	128	3,833	2,447	106	23	4,086	5,543	14,321
Greenwood (White)..	....	....	1,606	30,555	....	....	....	17,792	7,735	68,270
Greenwood (Colored)..	....	....	26	1,379	....	....	6	368	21	1,671
Hunting Is. (White)..	....	....	2,424	27,203	37,317	2,377	3,026	23,283	25,019	99,834
Hunting Is. (Colored)	....	....	972	7,525	5,145	1,437	298	2,025	3,341	10,894
Kings Mountain .....	....	....	1,308	16,096	15,664	9,655	8,687	15,371	25,298	61,689
Lee .....	....	....	578	8,013	5,684	3,191	63	19,190	15,431	63,533
Myrtle Beach .....	1,138	5,140	2,573	30,159	23,740	5,501	3,025	15,856	22,254	58,972
Oconee .....	1,670	9,854	4,434	22,319	32,825	10,093	1,695	31,604	8,329	111,225
Paris Mountain .....	....	....	4,488	57,962	24,474	....	....	38,919	....	195,507
Poinsett .....	457	3,164	2,271	21,429	18,320	11,685	544	13,445	20,780	61,372
Rivers Bridge .....	....	....	76	1,570	2,945	....	243	7,665	113	21,550
Sesqui-Centennial ....	....	....	22,535	175,523	151,839	22,205	15,764	75,782	128,045	369,833
Table Rock .....	1,230	6,981	4,237	34,931	38,485	10,523	2,445	32,200	54,461	146,946
Aiken Wayside .....	....	....	609	1,359	....	....	32	733	881	2,796
Colleton Wayside ...	....	....	591	4,365	....	....	592	1,291	1,084	4,383
Greenville Wayside .	....	....	787	7,904	....	....	28	1,886	2,640	8,115
Greenwood Wayside..	....	....	735	6,635	....	....	30	2,065	2,127	8,256
Burnt Gin .....	....	....	1	299	....	....	....	81	....	1,937
Mill Creek (Colored)..	....	....	....	....	....	....	....	13	....	993
TOTALS .....	5,731	31,845	55,593	535,174	424,537	112,264	48,084	370,886	433,574	1,562,260





On the beautiful Edisto River, Givhans Ferry State Park offers swimming and fishing.



## VACATION ACCOMMODATIONS

*Cabins:* State Park cabins were reserved for the entire season. Even with the addition of twenty trailer type cabins at Myrtle Beach State Park, all facilities were booked solidly for the entire summer season. An interesting trend which has been taking place gradually for several years was accelerated this past year. This was the heavy increase of "off season" use of vacation cabins. South Carolinians are evidently taking vacations in the fall, late fall and early spring, as well as in the summer months.

*Group Camps:* The seven group camps were also used to a greater extent than ever before by church groups, 4-H clubs, boy and girl scouts, Camp Opportunity School Jr., S. C. Orthopedic Camps, Salvation Army and County Home and Demonstration Agents. The Camp Leaders' Training School offered instruction in program and leadership for organizations using these camps, thereby providing better and more intelligent use of these areas.

Continued increased use of State Parks indicates the need for continuing expansion of picnic facilities, vacation cabins, bathing beaches and practically all facilities. The legislature granted \$150,000 for 1948-49 year to provide some of these improvements. This program is now underway. However, this beginning is only a step in what should be an annual expansion of parks to meet the ever increasing demands of the public for State Park use.

It has been clearly demonstrated that additional parks for negroes must be provided. Negotiation is now underway to provide a negro park in Greenville county. Great local interest has been shown regarding negro areas also in the Columbia section and Charleston section of the state.

During the past year a negro park was established on Poinsett State Forest adjoining the Mill Creek Colored Group Camp.





Picnic facilities are in great demand at all state parks.



**APPENDIX**  
**FINANCIAL STATEMENT**  
**SOUTH CAROLINA STATE COMMISSION OF FORESTRY**  
**July 1, 1947 — June 30, 1948**

**Receipts**

**Division of Forestry:**

Balance from 1946-47 Trust Fund .....	\$ 2,520.53
Trust Fund—Aiken Forest .....	5,873.39
State Appropriation—Operating .....	577,400.00
State Appropriation — Permanent Improvements .....	108,525.00
Supplemental State Appropriation .....	5,212.67
Allotment from Civil Contingent Fund .....	15,305.00
Federal Funds—Prot. CM Law, Sec. 2 .....	334,777.00
Federal Funds — Reforestation, CM Law, Sec. 4 & N-D .....	3,679.21
Federal Funds—Farm Forestry Nursery .....	962.23
State & County Forests .....	16,722.14
Tractor Project .....	32,747.94
Marking and Tallying Timber .....	7,883.15
Miscellaneous .....	5,273.31
	3,161.30
<hr/>	
Total Receipts .....	\$1,120,042.87
Less Receipts Deposited to Credit of State Revenue Account .....	65,787.84
<hr/>	
Total Receipts Available for Expenditure .....	1,054,255.03
Total Expenditures .....	1,045,511.27
<hr/>	
Balance—Division of Forestry .....	\$ 8,743.76*



## Division of State Parks:

Balance from 1946-47 (Not expendable) .....	\$ 4,844.15
State Appropriation — Operating .....	197,560.00
State Appropriation — Repairing Park Properties .....	121,000.00
State Appropriation — Historical Areas .....	5,000.00
State Appropriation — Supplemental .....	24,707.23
State Appropriation — E a r - marked (Specified Parks) ..	11,702.98
Allotment from Civil Contingent Fund .....	2,500.00
Advanced Planning — Federal Fund .....	1,291.00
Cabin & Group Camp Rentals ..	29,779.16
Concessions & Dining Rooms ---	7,106.22
Bathhouse & Swimming .....	28,438.19
Boat Rentals .....	3,395.05
Training & Day Camp Fees ---	3,675.00
Miscellaneous .....	1,217.66
<hr/>	
Total Receipts .....	\$ 442,216.64
Less Receipts Deposited to Credit of State Revenue Account .....	73,611.28
<hr/>	
Total Receipts Available for Expenditure .....	368,605.36
Total Expenditures .....	363,137.17
<hr/>	
Balance—Division of State Parks .....	\$ 5,468.19**



**Expenditures**

Administrative and Technical....\$	241,999.65
State Forest Nursery .....	48,164.44
State Forest Projects .....	47,214.88
County Forest Projects .....	4,138.92
Firebreak Projects .....	18,133.93
Fire Protection .....	574,232.40
Farm Forestry Project .....	3,102.05
Permanent Improvements—	
Fire Control .....	79,718.66
Permanent Improvements—	
Nursery .....	28,806.34
<hr/>	
Total (Division of Forestry)	\$ 1,045,511.27
Total (Division of State	
Parks) .....	363,137.17
<hr/>	
Total—All Expenditures .....	\$ 1,408,648.44

**Recapitulation****Funds Available:**

Division of Forestry .....	\$ 1,054,255.03
Division of State Parks .....	368,605.36
<hr/>	
	\$ 1,422,860.39

**Expenditures:**

Division of Forestry .....	\$ 1,045,511.27
Division of State Parks .....	363,137.17
<hr/>	
	\$ 1,408,648.44
<hr/>	
	\$ 14,211.95***

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\*Aiken Forest Funds, not expendable—\$8,393.92

\*Federal Fund—\$349.84

\*\*Hunting Island Deposits, not expendable—\$4,769.15

\*\*Historical Area Funds, unexpended—\$699.04

\*\*\*Total Balance—\$14,211.95







TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1947-48

UNIT	Organized Personnel							Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Members, Retainer Crews	Members, Flexible Crews	Total	Volunteer, FFFS Crews	Other Volunteers	
Abbeville .....	1	2	..	1	..	6	10	35	..	45
Aiken .....	1	4	2	5	..	23	35	5	287	292
Allendale .....	1	2	1	3	..	6	13	4	28	32
Anderson .....	1	2	..	3	..	8	14	106	..	120
Bamberg .....	1	2	1	2	..	9	15	29	77	106
Barnwell .....	1	2	1	3	..	9	16	34	139	173
Beaufort .....	2	2	1	3	..	5	13	1	35	49
Berkeley .....	1	4	1	3	..	17	26	41	..	67
Calhoun .....	1	2	1	2	..	5	11	22	74	96
Charleston .....	1	4	1	2	..	13	21	12	132	165
Cherokee .....	1	1	..	1	..	4	7	197	..	204
Chester .....	1	3	..	1	..	7	12	31	..	43
Chesterfield .....	1	3	1	4	..	16	25	135	162	322
Clarendon .....	1	3	1	3	..	12	20	82	..	102
Colleton .....	1	4	2	5	..	5	17	42	180	239
Darlington .....	1	2	1	3	..	6	13	30	..	43
Dillon .....	1	2	1	2	..	4	10	30	..	40
Dorchester .....	1	3	1	3	..	5	13	..	47	60
Edgefield .....	1	2	..	1	..	3	7	24	..	31
Fairfield .....	1	4	..	3	43	..	51	..	..	51
Florence .....	1	4	1	4	..	11	21	40	..	61
Georgetown .....	1	4	2	4	3	17	31	90	..	121
Greenville .....	1	3	..	4	..	8	16	107	..	123
Greenwood .....	1	2	..	2	..	14	19	42	..	61
Hampton .....	1	3	1	3	..	8	16	52	126	194
Horry .....	1	4	2	4	..	15	26	60	..	86
Jasper .....	1	3	1	2	..	8	15	..	33	48
Kershaw .....	1	3	2	6	..	11	23	124	208	355
Lancaster .....	1	3	..	2	..	3	9	120	122	251
Laurens .....	1	3	..	2	..	5	11	52	..	63
Lee .....	1	2	1	3	..	12	19	72	65	156
Lexington .....	1	3	2	5	..	5	16	..	298	298
Marion .....	1	3	1	3	..	7	15	30	..	45
Marlboro .....	1	2	1	3	..	6	13	30	..	43
McCormick .....	1	1	..	..	..	1	3	14	..	17
Newberry .....	1	2	..	2	..	10	15	31	..	46
Oconee .....	1	2	..	2	..	13	18	108	..	144
Orangeburg .....	1	5	2	5	..	8	21	..	192	192
Pickens .....	1	3	..	4	..	13	21	88	..	109
Richland .....	1	5	1	4	..	16	27	180	179	386
Saluda .....	1	2	..	1	..	5	9	29	..	38
Spartanburg .....	1	2	..	4	..	11	18	41	..	59
Sumter .....	1	3	1	3	..	14	22	135	62	219
Union .....	1	2	..	1	..	6	10	155	..	165
Williamsburg .....	1	5	1	4	..	15	26	134	..	160
York .....	1	2	..	4	..	3	10	224	..	234
TOTALS .....	47	129	35	134	46	408	799	2,818	2,446	5,954



TABLE 2—EDUCATIONAL WORK—PROTECTIVE ORGANIZATIONS—FISCAL YEAR 1947-48

UNIT	Rangers and Wardens										Tower-men	
	Visits to Sawmills	Brush Burning Inspections	Notices Posted	Literature Distributed	People Interviewed	Talks at Schools	Forestry Picture Shows	News Releases	Educational Contests	Fire Law Prosecutions		Fire Law Convictions
Abbeville	17	4	823	25,862	793	8	4	9	29	..	..	228
Aiken	15	8	164	3,893	276	57	17	2	40	6	4	1,069
Allendale	12	1	285	958	521	26	13	11	13	4	..	170
Anderson	20	..	810	26,968	550	20	4	15	58	..	..	930
Bamberg	10	..	388	6,847	506	26	11	12	12	1	1	381
Barnwell	163	170	451	291	1,402	83	7	7	39	1	1	4,853
Beaufort	..	20	118	743	50	25	13	7	14	2	1	89
Berkeley	6	87	1,191	30,056	54	78	11	2	27	3	3	40
Calhoun	26	12	124	648	269	53	9	1	23	..	..	120
Charleston	16	93	201	8,580	1,023	38	11	6	68	1	1	310
Cherokee	36	9	690	22,100	355	12	5	6	46	1	1	201
Chester	17	23	640	25,862	782	9	8	10	44	..	..	1,332
Chesterfield	170	29	820	31,211	1,265	65	21	11	57	8	8	1,699
Clarendon	14	127	1,367	18,055	1,313	24	19	7	51	5	4	276
Colleton	72	40	423	2,706	2,158	124	16	2	38	3	3	1,705
Darlington	14	..	436	17,048	672	2	3	..	42	3	3	509
Dillon	6	3	412	2,263	648	..	11	3	38	8	8	345
Dorchester	72	31	59	975	522	53	22	1	40	1	1	111
Edgefield	28	18	507	25,862	380	25	7	9	44	3	3	117
Fairfield	31	4	256	25,862	1,053	12	12	7	44	3	3	272
Florence	22	18	169	13,482	1,058	..	5	31	82	13	12	624
Georgetown	..	1	1,125	39,222	574	..	13	3	26	3	3	180
Greenville	3	11	1,093	29,500	1,440	16	12	35	62	..	..	3,144
Greenwood	29	16	252	25,812	12	30	7	8	38	..	..	284
Hampton	17	14	295	10,325	71	132	11	27	33	22	22	1,132
Horry	3	20	..	11,225	168	13	24	3	80	32	30	441
Jasper	11	4	336	1,997	57	66	6	5	21	4	3	200
Kershaw	45	5	284	32,061	516	98	23	8	55	3	3	2,032
Lancaster	41	21	571	26,671	3,396	62	20	4	60	9	9	1,260
Laurens	9	63	369	25,812	223	6	11	5	44	1	1	138



Lee .....	3	4	119	20,525	1,523	56	19	8	36	3	3	2,230
Lexington .....	19	7	118	547	2,092	47	7	12	26	5	5	890
Marion .....	..	6	202	10,101	665	5	3	7	38	12	12	494
Marlboro .....	4	16	430	2,869	457	..	5	6	39	5	5	387
McCormick .....	30	5	979	25,787	22	5	5	15	38	..	..	634
Newberry .....	19	..	50	25,887	230	18	7	14	44	1	1	1,691
Oconee .....	22	6	900	26,000	467	14	6	8	52	1	1	1,103
Orangeburg .....	3	19	144	720	622	45	5	2	40	7	6	2,430
Pickens .....	7	4	860	25,500	452	16	12	17	47	5	5	3,585
Richland .....	143	33	304	30,361	1,213	55	29	4	46	3	3	96
Saluda .....	77	14	156	25,862	724	29	8	21	44	1	1	1,787
Spartanburg .....	8	4	840	24,000	2,002	20	7	27	48	3	3	1,090
Sumter .....	90	75	468	28,845	815	91	41	17	60	5	5	405
Union .....	64	3	830	26,600	1,087	18	4	18	46	1	1	186
Williamsburg .....	15	39	1,192	28,614	1,656	23	19	1	53	3	3	619
York .....	10	3	960	28,250	642	14	7	22	62	..	..	40,819
TOTALS .....	1,439	1,094	23,211	823,365	36,776	1,630	540	450	1,987	196	189	



**TABLE 3—FIREBREAKS CONSTRUCTED AND MAINTAINED WITH STATE  
OWNED EQUIPMENT—1947-48**

COUNTY	Number Landowners Cooperating	TRACTOR MILES PLOWED		Total Tractor Miles
		Construction	Maintenance	
Aiken .....	17	41.2	205.5	246.7
Bamberg .....	3	12.4	10.2	22.6
Barnwell .....	2	8.4	15.9	24.3
Beaufort .....	2	1.5	14.5	16.0
Calhoun .....	12	98.7	....	98.7
Charleston .....	17	75.2	93.0	168.2
Chesterfield .....	1	23.6	10.7	34.3
Clarendon .....	32	119.0	....	119.0
Colleton .....	5	24.5	....	24.5
Darlington .....	54	210.3	45.3	255.6
Dillon .....	50	11.0	152.3	163.3
Dorchester .....	2	8.1	4.6	12.7
Florence .....	17	36.8	....	36.8
Georgetown .....	4	51.2	81.7	132.9
Hampton .....	8	90.8	56.2	147.0
Horry .....	13	114.8	40.1	154.9
Kershaw .....	4	39.4	....	39.4
Lee .....	1	11.5	....	11.5
Lexington .....	5	45.1	....	45.1
Marion .....	9	32.6	8.1	40.7
Marlboro .....	2	11.2	2.6	13.8
Orangeburg .....	6	30.1	81.2	111.3
Richland .....	11	73.3	11.4	84.7
Sumter .....	18	172.8	12.4	185.2
Williamsburg .....	1	46.3	....	46.3
<b>TOTAL .....</b>	<b>296</b>	<b>1,389.8</b>	<b>845.7</b>	<b>2,235.5</b>



TABLE 4—SUMMARY OF FIRES BY MONTHS—JULY 1, 1947-JUNE 30, 1948

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	65	2.1	359.9	5.5
August .....	30	0.9	131.8	4.4
September .....	66	2.1	462.3	7.0
October .....	30	0.9	128.8	4.3
November .....	25	0.8	116.1	4.6
December .....	127	4.0	891.5	7.0
January .....	434	13.8	6,511.4	15.0
February .....	558	17.8	14,329.5	25.7
March .....	747	23.7	11,373.3	15.2
April .....	606	19.2	6,953.7	11.5
May .....	327	10.4	4,137.4	12.7
June .....	134	4.3	1,564.1	11.7
TOTALS .....	3,149	100.0	46,959.8	14.9



TABLE 5--SUMMARY OF FIRES BY CAUSES--FISCAL YEAR 1947-48

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Unknown		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	...	...	14	93.0	2	2.4	9	45.9	4	114.5	1	16.5	1	1.0	3	43.0	...	...	34	316.3
Aiken	4	52.0	11	503.8	7	109.9	46	309.9	12	152.2	35	430.4	7	78.3	12	18.1	2	10.0	136	1,564.6
Allendale	...	...	7	92.5	...	...	26	537.3	8	145.6	2	78.0	2	12.0	1	4.8	2	33.0	48	903.2
Anderson	...	...	2	1.2	2	40.7	21	244.0	32	174.0	...	...	...	...	2	206.1	...	...	59	666.0
Bamberg	...	...	...	...	...	...	33	142.4	24	115.9	2	17.0	2	10.0	8	142.0	8	96.1	77	523.4
Barnwell	1	1.0	...	...	...	...	53	566.0	2	66.0	...	...	...	...	...	...	...	...	56	633.0
Beaufort	1	10.0	...	17.7	...	...	7	43.0	6	32.7	47	501.1	...	...	2	27.3	...	...	65	656.8
Berkeley	...	...	3	7.3	8	128.1	25	297.1	19	357.4	75	2,359.7	5	165.0	2	37.3	2	20.5	143	3,372.4
Calhoun	2	1.5	...	6.8	...	...	21	355.5	2	3.2	4	6.7	...	...	4	14.7	...	...	36	388.4
Charleston	...	...	5	137.0	2	15.0	25	623.3	9	219.5	23	726.7	1	1.0	...	70.0	...	...	66	1,792.5
Cherokee	...	...	3	8.1	2	3.0	18	72.3	5	25.2	1	25.0	...	...	1	0.5	...	...	30	134.1
Chester	...	...	4	24.0	...	...	9	32.6	6	23.0	...	...	2	12.0	3	32.5	...	...	24	124.1
Chesterfield	3	76.3	...	22.9	1	1.5	16	335.5	10	544.4	7	77.1	...	...	7	308.7	...	...	48	1,366.4
Clarendon	...	...	4	2.0	2	18.0	13	110.3	15	508.0	...	...	...	...	4	26.5	2	3.0	100	1,324.4
Colleton	2	75.0	1	12.0	1	25.0	19	75.9	16	88.4	63	656.6	...	...	...	...	3	39.0	89	942.1
Darlington	2	4.1	1	3	12	185.0	44	544.6	19	72.7	47	626.8	5	28.4	...	...	1	5.0	93	856.2
Dillon	...	...	6	40.4	3	19.0	13	42.9	13	183.5	22	292.5	3	12.0	...	...	...	...	60	590.3
Dorchester	...	...	1	0.7	1	7.0	18	416.0	13	325.7	1	1.5	1	2.0	1	12.0	1	150.0	37	914.9
Edgefield	...	...	...	70.0	...	...	4	6.2	7	18.2	...	...	1	1.8	4	130.6	1	7.7	20	234.5
Fairfield	...	...	3	3.8	...	...	9	75.9	5	40.5	1	12.0	...	...	...	...	1	2.8	19	135.0
Florence	...	...	3	28.7	5	89.0	42	632.3	40	500.9	38	576.7	3	100.8	3	1.1	2	146.0	136	2,075.5
Georgetown	...	...	6	163.0	1	122.0	7	230.2	5	19.1	88	2,394.2	...	...	2	11.1	1	3.0	110	2,942.6
Greenville	...	...	5	5.1	5	8.7	41	242.7	22	97.9	4	31.0	...	...	13	249.2	...	...	90	634.6
Hampton	1	1.0	...	89.8	1	3.6	18	171.2	9	64.8	...	...	...	...	6	29.4	1	58.0	43	417.8
Horry	...	...	2	4.5	1	30.0	12	502.5	19	299.8	...	...	...	...	5	57.3	...	...	46	931.9
Jasper	1	88.0	1	2.8	4	24.0	50	1,269.2	51	1,129.6	7	37.8	...	...	10	92.2	18	955.9	187	6,531.8
Kershaw	1	2	...	68.0	...	...	18	633.5	9	90.2	49	2,920.2	3	49.9	18	672.2	8	178.0	58	1,679.9
Lancaster	1	6.0	...	98.8	...	...	25	244.1	3	85.0	2	27.5	1	10.3	3	5.8	1	24.0	78	647.9
Laurens	...	...	2	7.0	...	...	8	31.2	13	79.9	6	72.1	...	...	3	0.4	...	...	32	190.6
Lee	...	...	5	22.3	9	57.9	41	272.4	18	91.8	1	8.0	...	...	...	...	...	...	74	452.4
Lexington	...	...	...	...	1	29.1	13	125.6	3	12.0	3	6.2	...	...	...	68.2	...	...	26	213.4
Marion	8	26.1	...	8.0	4	10.3	26	132.4	11	90.1	9	122.4	...	...	7	25.5	...	...	67	433.6
	1	4	6	47.1	2	...	20	146.3	21	525.9	25	864.4	...	...	4	6.6	1	2.6	80	1,603.6



[illegible]



TABLE 6—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1947-48

UNIT	Class A		Class B		Class C		Class D		Class E		Total Number	Percent of Total Number
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Abbeville	...	...	24	1.2	10	1.2	...	...	...	...	34	1.1
Aiken	8	4.0	100	4.9	27	3.2	1	1.6	...	...	136	4.3
Allendale	...	...	33	1.6	14	1.7	1	1.6	...	...	48	1.5
Anderson	2	1.0	45	2.2	10	1.2	2	3.2	...	...	59	1.9
Bamberg	3	1.6	66	3.2	8	1.0	...	...	...	...	77	2.4
Barnwell	...	...	36	1.7	20	2.4	...	...	...	...	56	1.8
Beaufort	...	...	45	2.2	20	2.4	...	...	...	...	65	2.1
Berkeley	5	2.5	93	4.5	38	4.6	7	11.1	...	...	143	4.5
Calhoun	4	2.0	27	1.3	4	.5	1	1.6	...	...	36	1.1
Charleston	...	...	37	1.8	26	3.1	3	4.8	...	...	66	2.1
Cherokee	...	...	26	1.3	4	.5	...	...	...	...	30	1.0
Chester	...	...	23	1.1	1	.1	...	...	...	...	24	.8
Chesterfield	3	1.6	30	1.5	11	1.3	4	6.3	...	...	48	1.5
Clarendon	16	8.0	59	2.9	24	2.9	1	1.6	...	...	100	3.2
Colleton	13	6.6	54	2.6	22	2.6	...	...	...	...	89	2.8
Darlington	11	5.5	69	3.3	11	1.3	2	3.2	...	...	93	3.0
Dillon	4	2.0	39	1.9	17	2.0	...	...	...	...	60	1.9
Dorchester	...	...	23	1.1	11	1.3	3	4.8	...	...	37	1.2
Edgefield	1	.5	16	.8	3	.4	...	...	...	...	20	.6
Fairfield	...	...	15	.7	4	.5	...	...	...	...	19	.6
Florence	13	6.6	67	3.3	55	6.6	...	...	...	...	136	4.3
Georgetown	11	5.5	50	2.4	43	5.2	1	1.6	...	...	110	3.5
Greenville	16	8.0	62	3.0	11	1.3	5	7.9	1	...	90	2.9
Greenwood	...	...	32	1.6	11	1.3	1	1.6	...	...	43	1.4
Hampton	1	.5	28	1.4	16	1.9	...	...	...	...	46	1.5
Horry	11	5.5	77	3.8	86	10.3	12	19.0	...	...	187	6.0
Jasper	3	1.6	21	1.0	34	4.1	...	...	...	...	58	1.8
Kershaw	8	4.0	54	2.6	16	1.9	...	...	...	...	78	2.5
Lancaster	3	1.5	23	1.1	6	.7	...	...	...	...	32	1.0
Laurens	...	...	62	3.0	12	1.4	...	...	...	...	74	2.3
Lee	2	1.0	19	.9	5	.6	...	...	...	...	26	.8
Lexington	4	2.0	51	2.5	12	1.4	...	...	...	...	67	2.1



Marion .....	8	4.0	47	2.3	23	2.9	1	1.6	1	33.4	80	2.5
Marlboro .....	8	4.0	38	1.9	26	3.2	5	7.9	5	....	77	2.4
McCormick .....	1	.5	32	1.6	13	1.7	....	....	....	....	46	1.5
Newberry .....	....	....	25	1.2	3	.4	1	1.6	1	....	29	.9
Oconee .....	4	2.0	47	2.3	12	1.5	....	....	....	....	63	2.0
Orangeburg .....	....	....	194	9.4	74	8.9	5	7.9	5	....	273	8.7
Pickens .....	4	2.0	31	1.5	2	.2	....	....	....	....	37	1.2
Richland .....	12	6.0	63	3.1	26	3.1	....	....	....	....	101	3.2
Saluda .....	3	1.5	7	.3	4	.5	....	....	....	....	14	.4
Spartanburg .....	4	2.0	30	1.5	6	.7	1	1.6	1	....	41	1.3
Sumter .....	1	.5	24	1.2	9	1.1	....	....	....	....	34	1.1
Union .....	....	....	17	.8	6	.7	....	....	....	....	23	.7
Williamsburg .....	6	3.0	37	1.8	22	2.6	5	7.9	5	....	70	2.2
York .....	6	3.0	55	2.7	13	1.6	....	....	....	....	74	2.4
TOTALS.....	199	100.0	2,053	100.0	831	100.0	63	100.0	3	100.0	3,149	100.0



TABLE 7—SUMMARY OF FIRES BY COUNTIES AND MONTHS— FISCAL YEAR 1947-48

UNIT	July 1947		Aug. 1947		Sept. 1947		Oct. 1947		Nov. 1947		Dec. 1947		Jan. 1948		Feb. 1948		Mar. 1948		April 1948		May 1948		June 1948	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	1	1.0	...	...	...	...	...	...	...	...	1	1.0	9	46.9	2	3.9	7	58.2	6	141.3	6	45.2	1	3
Aiken	7	5.5	3	6.0	4	18.5	...	...	...	...	4	27.9	20	106.7	20	289.5	32	510.1	16	108.8	17	521.3	7	54.0
Allendale	1	2.0	1	10.0	2	33.7	1	1.5	...	...	6	66.3	3	26.2	12	562.0	12	187.8	3	4.1	4	31.6	3	7.7
Anderson	2	6.2	...	...	3	4.0	...	...	...	...	2	4.1	2	9	7	41.4	12	74.9	17	212.5	10	98.4	1	4.5
Bamberg	...	...	...	...	...	...	...	...	...	...	...	...	21	113.9	22	118.6	18	219.4	2	6.0	2	8.0	1	6.0
Barnwell	4	60.0	1	6.0	...	...	...	...	...	...	...	...	7	63.0	12	107.0	9	164.0	15	155.0	6	76.0	2	2.0
Beaufort	...	...	...	...	...	...	...	...	...	...	...	...	23	213.1	13	165.0	14	142.9	8	84.5	1	2.0	2	10.8
Berkeley	...	...	...	...	...	...	...	...	...	...	...	...	23	981.1	38	1,377.9	27	238.8	26	370.1	18	241.6	7	61.4
Calhoun	...	...	...	...	...	...	...	...	...	...	...	...	3	32.1	4	235.0	10	56.3	9	23.0	6	30.6	1	1.0
Charleston	...	...	...	...	...	...	...	...	...	...	...	...	12	234.6	14	575.5	15	279.3	16	517.0	3	37.5	1	10.0
Cherokee	1	.9	...	...	...	...	...	...	...	...	...	...	3	3.0	3	38.4	8	36.5	3	13.7	3	23.6	...	...
Chester	...	...	...	...	...	...	...	...	...	...	...	...	5	18.6	4	20.0	3	4.5	7	29.0	2	5.0	2	7.0
Chesterfield	5	24.5	...	...	...	...	...	...	...	...	...	...	...	38.0	5	169.6	7	522.7	14	222.4	5	30.8	5	343.3
Clarendon	1	4.0	...	...	...	...	...	...	...	...	...	...	22	51.3	34	404.1	19	560.7	13	198.7	1	10.0	6	71.3
Colleton	...	...	...	...	...	...	...	...	...	...	...	...	16	155.8	15	68.5	15	194.1	31	333.4	3	38.5	4	78.5
Darlington	1	1	...	...	...	...	...	...	...	...	...	...	12	180.3	13	35.4	18	117.5	23	229.1	10	266.5	4	6.2
Dillon	1	2.4	1	7.8	1	9.9	...	...	...	...	...	...	2	23.5	18	317.9	11	34.7	7	78.4	10	49.2	1	1.5
Dorchester	...	...	...	...	...	...	...	...	...	...	...	...	15	319.2	8	303.0	7	251.5	3	19.2	2	18.0	...	...
Edgefield	2	2.2	...	...	...	...	...	...	...	...	...	...	2	6.6	...	...	4	60.9	6	12.5	5	10.3	...	...
Fairfield	1	1.5	...	...	...	...	...	...	...	...	...	...	2	26.5	...	...	5	51.1	6	35.9	2	14.0	...	...
Florence	...	...	...	...	...	...	...	...	...	...	...	...	30	282.9	33	686.3	22	484.4	20	207.7	8	82.7	...	...
Georgetown	...	...	...	...	...	...	...	...	...	...	...	...	8	148.1	17	1,377.5	40	563.7	30	511.2	5	123.2	...	...
Greenville	1	.2	...	...	...	...	...	...	...	...	...	...	3	5.4	10	50.5	18	135.2	29	126.2	14	274.8	...	...
Greenwood	2	14.0	1	10.0	...	...	...	...	...	...	...	...	6	35.6	5	89.5	8	177.0	6	23.0	6	22.9	...	...
Hampton	1	5.0	...	...	...	...	...	...	...	...	...	...	9	404.0	12	267.8	11	127.5	8	85.8	...	...	...	...
Horry	...	...	...	...	...	...	...	...	...	...	...	...	35	960.4	44	2,953.2	42	1,233.9	25	711.4	...	...	...	...
Jasper	...	...	...	...	...	...	...	...	...	...	...	...	9	215.5	11	460.6	16	428.4	12	310.6	6	495.0	4	39.7
Kershaw	...	...	...	...	...	...	...	...	...	...	...	...	2	5.2	14	212.4	13	123.5	11	189.1	28	97.5	4	7.1
Lancaster	...	...	...	...	...	...	...	...	...	...	...	...	2	20.6	4	21.6	6	73.8	10	39.0	7	14.5	1	8.0
Laurens	...	...	...	...	...	...	...	...	...	...	...	...	4	11.9	10	108.0	24	155.6	10	36.7	9	32.6	8	87.4
Lee	4	12.1	...	...	...	...	...	...	...	...	...	...	...	62.3	5	35.8	6	39.6	3	70.0	...	...	...	...
Lexington	...	...	...	...	...	...	...	...	...	...	...	...	7	38.0	7	32.0	12	91.2	12	90.8	7	43.5	9	99.3
Marion	4	15.2	...	...	...	...	...	...	...	...	...	...	12	650.6	14	551.2	19	132.8	13	95.8	14	151.1	2	5.3
Marlboro	3	6.3	...	...	...	...	...	...	...	...	...	...	12	106.9	12	496.9	28	651.5	16	244.6	4	208.1	...	...



McCormick	2	2.2	1	20.0	2	1.8	1	3.8	1	21.9	3	18.3	9	69.8	6	49.6	8	149.0	6	65.4	5	116.0	2	20.9
Newberry	2	3.0	1	2.0	4	22.5	...	...	...	...	1	7.0	4	6.7	1	4.0	2	43.2	3	4.0	7	162.5	4	11.5
Oconee	2	4.5	1	.4	5	9.5	...	...	...	...	3	6.9	4	17.3	2	3.6	18	277.3	14	77.4	13	72.4	1	3.2
Orangeburg	2	9.7	...	...	1	1.2	...	3.0	...	...	6	24.5	28	176.6	51	849.9	103	1,421.9	56	561.2	21	92.9	3	7.2
Pickens	2	2.1	...	3.1	2	.5	...	...	1	.8	1	8	...	...	2	1.7	3	7.3	13	49.9	10	17.4	...	...
Richland	6	111.0	...	...	4	12.1	...	.5	...	...	6	28.2	18	152.1	17	136.3	17	380.1	11	58.3	12	34.1	...	17.2
Saluda	3	43.2	1	27.0	2	36.2	...	...	...	...	...	...	...	...	2	.5	4	17.3	2	6.2	...	...	...	...
Spartanburg	1	.3	1	1.5	...	...	...	...	...	...	...	...	...	...	3	128.0	9	111.0	18	218.7	4	10.6	...	...
Sumter	...	...	...	...	1	8.0	...	...	...	...	3	27.9	4	5.6	1	9.0	7	69.9	7	66.2	7	122.0	1	4.0
Union	1	.3	...	...	1	5.7	...	...	...	...	...	...	2	10.8	2	5.6	4	38.4	8	64.7	3	47.0	4	22.6
Williamsburg	1	1.0	...	...	...	...	...	1.5	...	...	3	...	8	444.8	19	929.8	28	418.2	7	72.4	3	1.0	2	7.1
York	1	19.5	1	.3	...	17.1	1	.5	1	16.0	1	19.4	3	26.8	7	29.5	24	255.7	25	112.8	6	14.5	...	...
TOTALS	65	359.9	30	131.8	66	462.3	30	128.8	25	116.1	127	891.5	434	6,511.4	558	14,329.5	745	11,373.3	606	6,953.7	329	4,137.4	134	1,564.1



TABLE 8—CLASSIFICATION BY CAUSES—FISCAL YEAR 1947-48

CAUSES	Number of Fires	Percent Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	39	1.2	405.5	10.4
Railroads .....	221	7.0	2,436.0	11.0
Campers .....	89	2.8	1,026.3	11.5
Smokers .....	983	31.2	11,774.7	12.0
Debris Burning .....	615	19.5	8,273.1	13.5
Incendiary .....	896	28.5	17,909.2	20.0
Lumbering .....	54	1.7	629.9	11.7
Miscellaneous .....	186	5.9	2,589.8	13.9
Unknown .....	66	2.1	1,915.3	29.0
TOTALS .....	3,149	100.0	46,959.8	14.9

TABLE 9—CAUSES OF FIRES—FIVE YEAR PERIOD  
(Percent of Total)

CAUSES	1943-44	1944-45	1945-46	1946-47	1947-48	Average for 5-year period
Lightning .....	.6	.3	.3	0.2	1.2	0.5
Railroads .....	9.7	6.7	8.3	7.1	7.0	7.8
Campers .....	5.5	4.4	2.7	3.4	2.8	3.8
Smokers .....	38.7	33.1	29.7	27.7	31.2	32.1
Debris Burning .....	17.1	14.9	19.8	20.4	19.5	18.3
Incendiary .....	17.7	24.8	27.1	27.7	28.5	25.2
Lumbering .....	1.6	1.7	1.7	2.0	1.7	1.7
Miscellaneous .....	6.1	7.1	4.9	6.8	5.9	6.2
Unknown .....	3.0	7.0	5.5	4.7	2.2	4.5



TABLE 10—SUMMARY OF REPORTED FIRES IN SOUTH CAROLINA—1947-48

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	217,948	34	316.3	0.14	9.3
Aiken .....	461,193	136	1,664.6	0.36	12.2
Allendale .....	145,079	48	903.2	0.62	18.8
Anderson .....	168,691	59	666.0	0.39	11.3
Bamberg .....	136,965	77	523.4	0.38	6.8
Barnwell .....	165,226	56	633.0	0.38	11.3
Beaufort .....	216,874	65	656.8	0.30	10.1
Berkeley .....	406,828	143	3,372.4	0.83	23.6
Calhoun .....	133,648	36	388.4	0.29	10.8
Charleston .....	309,670	66	1,792.5	0.58	27.2
Cherokee .....	135,076	30	134.1	0.10	4.5
Chester .....	243,181	24	124.1	0.05	5.2
Chesterfield .....	326,099	48	1,366.4	0.42	28.5
Clarendon .....	207,439	100	1,324.4	0.64	13.2
Colleton .....	500,164	89	942.1	0.19	10.6
Darlington .....	170,171	93	856.2	0.50	9.2
Dillon .....	150,418	60	590.3	0.39	9.8
Dorchester .....	288,269	37	914.9	0.32	24.7
Edgefield .....	165,772	20	234.5	0.14	11.7
Fairfield .....	366,125	19	135.0	0.04	7.1
Florence .....	317,296	136	2,075.5	0.65	15.3
Georgetown .....	424,870	110	2,942.6	0.69	26.8
Greenville .....	276,300	90	634.6	0.23	7.1
Greenwood .....	149,487	43	417.8	0.28	9.7
Hampton .....	232,638	46	931.9	0.40	20.3
Horry .....	560,179	187	6,531.8	1.17	34.9
Jasper .....	297,565	58	1,679.9	0.56	29.0
Kershaw .....	333,113	78	647.9	0.19	8.3
Lancaster .....	217,218	32	190.6	0.09	6.0
Laurens .....	217,175	74	452.4	0.21	6.1
Lee .....	115,514	26	213.4	0.18	8.2
Lexington .....	326,041	67	433.6	0.13	6.5
Marion .....	210,405	80	1,603.6	0.76	20.0
Marlboro .....	161,212	77	1,717.4	1.07	22.3
McCormick .....	105,882	46	538.7	0.51	11.7
Newberry .....	137,182	29	266.4	0.19	9.2
Oconee .....	215,672	63	472.5	0.22	7.5
Orangeburg .....	347,645	273	3,148.1	0.91	11.5
Pickens .....	208,140	37	83.6	0.04	2.3
Richland .....	297,145	101	929.9	0.31	9.2
Saluda .....	168,390	14	130.4	0.08	9.3
Spartanburg .....	238,785	41	486.3	0.20	11.9
Sumter .....	233,429	34	331.2	0.14	9.7
Union .....	156,659	23	179.6	0.11	7.8
Williamsburg .....	436,473	70	1,888.1	0.43	27.0
York .....	242,919	74	493.4	0.20	6.7
TOTALS .....	11,542,170	3,149	46,959.8	0.41	14.9

TABLE 11—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1943-44 .....	7,436,148	4,343	135,657.9	1.82	31.2
1944-45 .....	7,554,757	3,552	111,693.8	1.48	31.4
1945-46 .....	7,555,306	2,904	61,203.2	.81	21.1
1946-47 .....	11,655,623	6,601	232,040.2	1.99	35.2
1947-48 .....	11,542,170	3,149	46,959.8	.41	14.9



TABLE 12—DISTRIBUTION OF SEEDLINGS BY SPECIES BY COUNTY

COUNTY	Loblolly	Longleaf	Slash	Spruce	Total
Abbeville .....	6,000	9,200	7,000	.....	22,200
Aiken .....	49,330	135,840	299,330	.....	484,500
Allendale .....	45,000	41,000	319,000	.....	405,000
Anderson .....	67,500	.....	7,500	.....	75,000
Bamberg .....	15,000	6,000	9,000	.....	30,000
Barnwell .....	.....	10,000	719,000	.....	729,000
Beaufort .....	.....	1,000	239,900	.....	240,900
Berkeley .....	708,320	66,500	620,220	67,000	1,462,040
Calhoun .....	53,000	13,000	200,000	.....	266,000
Charleston .....	.....	18,000	42,500	.....	60,500
Cherokee .....	189,000	1,000	.....	.....	190,000
Chester .....	170,000	3,500	10,000	.....	183,500
Chesterfield .....	113,000	20,500	123,800	.....	257,300
Clarendon .....	1,500	23,000	129,000	.....	153,500
Colleton .....	66,000	35,000	166,000	149,000	416,000
Darlington .....	15,000	6,200	32,800	.....	54,000
Dillon .....	6,000	10,000	94,000	.....	110,000
Dorchester .....	1,500	24,000	16,000	99,350	140,850
Edgefield .....	47,000	1,000	3,000	.....	51,000
Fairfield .....	64,000	2,000	45,000	.....	111,000
Florence .....	.....	6,500	11,000	.....	17,500
Georgetown .....	102,000	1,000	73,000	.....	176,000
Greenville .....	76,600	.....	4,500	.....	81,100
Greenwood .....	187,400	6,100	22,500	.....	216,000
Hampton .....	.....	35,000	93,000	.....	128,000
Horry .....	121,000	9,000	45,500	.....	175,500
Jasper .....	27,000	35,000	343,000	.....	405,000
Kershaw .....	92,000	31,000	1,001,500	25,000	1,149,500
Lancaster .....	245,400	24,000	43,500	.....	312,900
Laurens .....	153,000	15,000	.....	.....	168,000
Lee .....	14,000	42,000	15,000	.....	71,000
Lexington .....	18,250	116,000	78,250	.....	212,500
Marion .....	.....	10,000	4,000	.....	14,000
Marlboro .....	30,000	1,000	8,000	.....	39,000
McCormick .....	132,000	1,000	.....	.....	133,000
Newberry .....	541,000	.....	.....	.....	541,000
Oconee .....	172,000	1,000	5,000	.....	178,000
Orangeburg .....	123,000	29,200	528,000	8,000	688,200
Pickens .....	29,000	2,200	3,200	.....	34,400
Richland .....	136,500	42,800	71,500	25,000	275,800
Saluda .....	8,000	1,000	29,000	.....	38,000
Spartanburg .....	109,700	5,500	31,000	.....	146,200
Sumter .....	47,000	56,000	143,600	.....	246,600
Union .....	129,500	.....	.....	.....	129,500
Williamsburg .....	110,000	12,500	23,000	.....	145,500
York .....	191,500	1,000	.....	.....	192,500
Out-of-State .....	.....	88,500	11,500	500	100,500
<b>TOTALS .....</b>	<b>4,413,000</b>	<b>999,040</b>	<b>5,671,600</b>	<b>373,850</b>	<b>11,457,490</b>

TABLE 13—DISTRIBUTION OF TREE SEEDLINGS BY LAND OWNERSHIP—1947-1948 CROP

LAND OWNERSHIP	Loblolly	Longleaf	Slash	Spruce	Total
Farms .....	1,926,130	505,040	3,180,230	.....	5,611,400
Other Individuals.....	387,370	150,000	256,170	1,500	795,040
Association and Clubs.....	.....	4,500	44,500	.....	49,000
Schools (Not State).....	16,500	6,500	10,500	.....	33,500
State Forests.....	103,000	52,500	156,200	.....	311,700
Other State Lands.....	630,500	10,000	493,000	.....	1,133,500
Cities, Towns and Counties.....	7,500	3,000	9,000	.....	19,500
Water and Power Co.....	125,000	.....	75,000	.....	200,000
Pulp and Paper Co.....	1,000,000	50,000	1,100,000	371,850	2,521,850
Lumber Co.....	150,000	8,500	296,000	.....	454,500
Railroad Co.....	.....	16,000	.....	.....	16,000
Other Industrials.....	67,000	104,500	39,500	.....	211,000
State Total.....	4,413,000	910,540	5,660,100	373,350	11,356,990
Out-of-State .....	.....	88,500	11,500	500	100,500
GRAND TOTAL.....	4,413,000	999,040	5,671,600	373,850	11,457,490



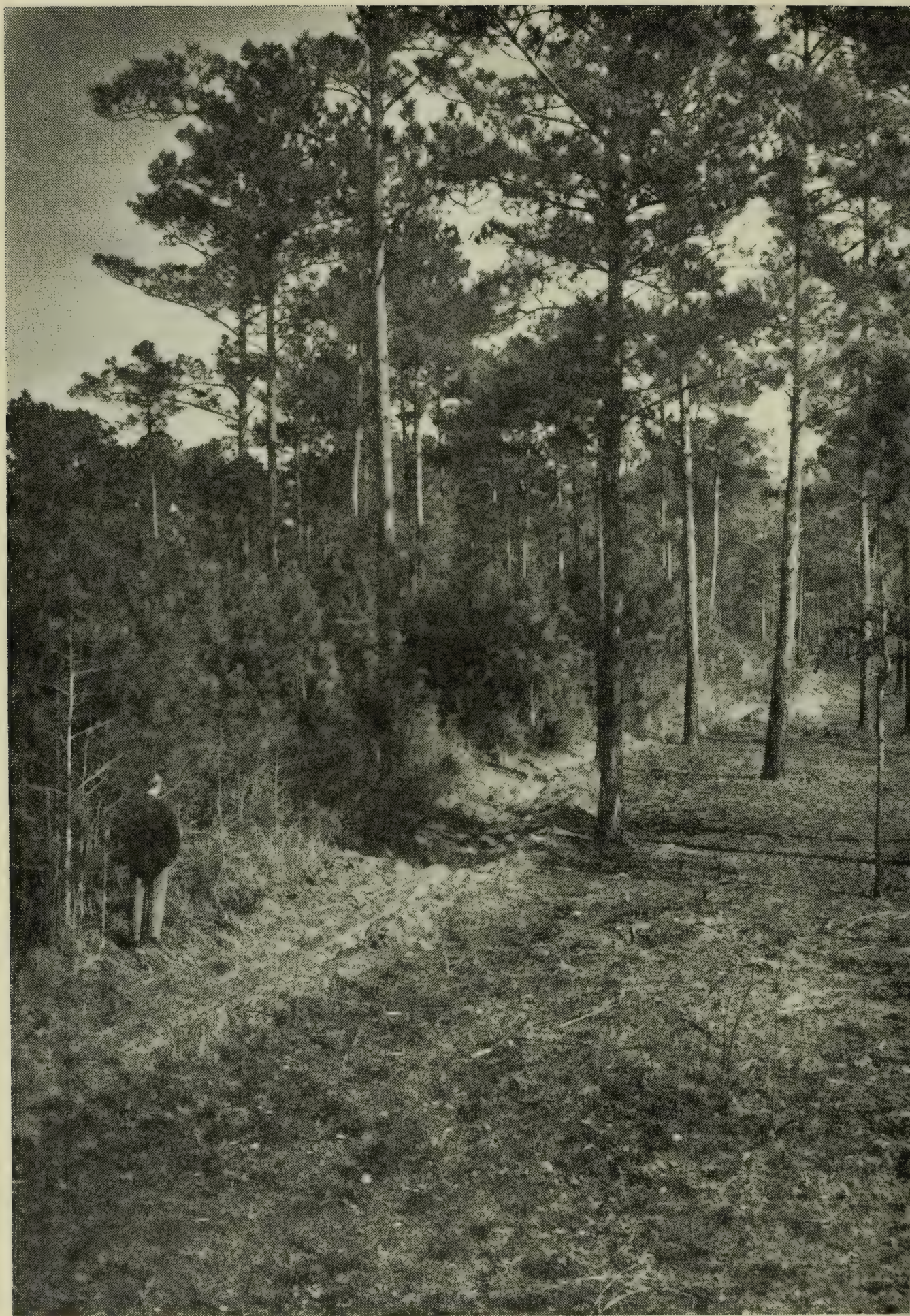












Look at the difference! On the right of the firebreak all the little trees have been killed by fire. On the left of the firebreak there has been no fire and there are plenty of little trees. Future timber saved by fire protection.



STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1948 TO JUNE 30, 1949

CHARLES H. FLORY, State Forester



COLUMBIA, S. C.

Printed Under the Direction of the  
Joint Committee on Printing  
General Assembly of South Carolina

## TABLE OF CONTENTS

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	Page
LETTER OF TRANSMITTAL .....	5
PERSONNEL .....	7
SUMMARY .....	9
FOREST FIRE PROTECTION.....	23
Forest Area Protected.....	26
Forest Fire Protection Organization.....	26
Protection Personnel .....	28
Fire Protection Activities.....	29
Improvements .....	33
Equipment .....	38
Forest Fire Summary.....	46
FOREST MANAGEMENT.....	53
Management Assistance.....	53
Reforestation .....	56
Cone Collection .....	60
Forest Survey.....	61
Farm Forestry .....	62
County and State Forests.....	62
Aiken County Forest.....	63
Cassatt State Forest.....	63
Harbison State Forest.....	64
Phelps State Forest .....	64
Poinsett State Forest.....	64
Sand Hills State Forest.....	67
PUBLIC RELATIONS.....	73
Cooperative Forest Fire Prevention Campaign.....	73
Forestry Quiz Contest.....	75
Forestry Demonstrations.....	77
Conservation Week.....	77
Towersite Beautification Contest.....	78
Motion Pictures.....	79
Vocational Agriculture School Forests.....	80
Resource Use Education.....	84
Talks .....	84
Radio .....	86
Exhibits .....	86
Southern States Public Relations Conference.....	88
Training .....	88
Publications and Posters.....	89
News Releases and Articles.....	91
Sign and Woodworking Shop.....	91
South Carolina Tree Farm System.....	92
Conservation School .....	93
STATE PARKS.....	95
Operation and Maintenance Detail.....	99
Vacation Accommodations.....	106
Table of Facilities.....	109
Recommendations .....	111
APPENDIX .....	113



## LETTER OF TRANSMITTAL

*To Honorable J. Strom Thurmond, Governor, and to the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1948 to June 30, 1949.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
Guy V. Whitener, *Chairman*.





Picnicking is enjoyed by thousands of people at state parks located all over South Carolina.



## THE STATE COMMISSION OF FORESTRY

Guy V. Whitener, Chairman, Newberry, S. C.  
 Richard G. Coker, Vice-Chairman, Hartsville, S. C.  
 Dr. R. F. Poole, Clemson, S. C.  
 Mr. A. Leland Slade, Jr., Aiken, S. C.  
 \*Mr. A. B. Taylor, Spartanburg, S. C.  
 Chas. H. Flory, Secretary and State Forester.

## DIVISION OF FORESTRY

C. H. Schaeffer (1), Associate State Forester, Columbia, S. C.  
 E. B. Price (2), Assistant State Forester, Management, Columbia, S. C.  
 John R. Tiller (3), Assistant State Forester, Protection, Columbia, S. C.  
 John C. Witherspoon, Assistant State Forester, Public Relations, Columbia, S. C.  
 D. G. Duncan, Administrative Assistant, Columbia, S. C.  
 G. W. Pettigrew, Management Assistant, Columbia, S. C.  
 E. C. Pickens (4), Management Assistant, Columbia, S. C.  
 Horace Campbell, Fire Control Assistant, Columbia, S. C.  
 John M. Shirer (5), Fire Control Assistant, Columbia, S. C.  
 John R. McLees, Fire Control Engineer, Columbia, S. C.  
 J. M. Geddings, Communications Engineer-Telephone, Columbia, S. C.  
 R. M. Littlejohn, Communications Engineer-Radio, Columbia, S. C.  
 W. J. Barton (6), Public Relations Assistant, Columbia, S. C.  
 Myron W. Tupper, Asst. Forester, Public Relations, Columbia, S. C.  
 Virginia S. Holmes, Head, Personnel & Office Services, Columbia, S. C.  
 C. H. Nelson, Head, Fiscal & Accounting, Columbia, S. C.  
 Hugh White, Head, Property & Supply, Columbia, S. C.  
 Cole L. Page, District Forester, Aiken, S. C.  
 A. A. Lehocky, District Forester, Camden, S. C.  
 Nelson L. Peach, District Forester, Florence, S. C.  
 Howard R. Scott (7), District Forester, Kingstree, S. C.  
 E. L. Middleswart (8), District Forester, Spartanburg, S. C.  
 W. L. Hardin, District Forester, Walterboro, S. C.

---

\* Filled unexpired term of E. W. Daniel and Dr. Carl Luxemburger.

E. F. Leysath, Director, Aiken Forest, Aiken, S. C.  
 Randolph B. Lee, Director, Sandhills State Forest, Patrick, S. C.  
 C. W. Nuite, Director, Poinsett State Forest, Wedgefield, S. C.  
 L. M. Staley, Nurseryman, Sumter, S. C.  
 L. M. Boice, Farm Forester, Orangeburg, S. C.

### DIVISION OF STATE PARKS

C. West Jacocks (9), State Park Director, Columbia, S. C.  
 T. D. Ravenel, Asst. Park Director-Operations, Columbia, S. C.  
 E. R. Vreeland (10), Asst. Park Director-Operations, Columbia,  
 S. C.  
 Albert Schellenberg, Asst. Park Director-Plans, Columbia, S. C.

- 
- (1) Resigned November 25, 1948, to enter private business.
  - (2) Promoted to Asst. State Forester, Management, following resignation of H. F. Bishop on September 16, 1948.
  - (3) Promoted to Asst. State Forester, Protection, following resignation of J. C. Blakeney on December 10, 1948.
  - (4) Promoted from District Forester, Spartanburg District, to Management Assistant, Columbia Office, on November 1, 1948.
  - (5) Promoted from District Forester, Kingstree District, to Fire Control Assistant, Columbia Office, on December 1, 1948.
  - (6) Promoted from Asst. Forester, Camden District, to Public Relations Assistant, Columbia Office, on November 1, 1948.
  - (7) Promoted from Asst. Forester to District Forester, Kingstree District, November 1, 1948.
  - (8) Promoted from Asst. Forester to District Forester, Spartanburg District, November 1, 1948.
  - (9) Promoted from Head, Recreation, to State Park Director on November 1, 1948, following resignation of P. R. Plumer.
  - (10) Promoted from Superintendent, Kings Mt. State Park, to Asst. Park Director-Operations, November 1, 1948.



## SUMMARY

The South Carolina State Commission of Forestry is charged with the responsibility of assisting landowners of the state in the growing, harvesting and protection of their woodlands, and the administration, operation and development of the state park system. To carry out these responsibilities the Commission has four main branches—state parks, forest fire control, forest management and public relations. Notable progress was made during the year, although the demand for these services by the public exceeded by far the facilities available to supply them.

The polio epidemic caused many people to stay away from state parks during the usual busy months. Taking this into consideration, state parks still provided rest, relaxation, fun and enjoyment to over 1 1/4 million people. In addition, numerous groups met at state parks to learn of conservation, because these areas are naturally suited to such meetings.

In spite of a very dry and windy January and March, fire protection forces held burned acreage down to .78 of 1% of the total forest land in the state. The average area of the fires was 17.7 acres.

Requests for timber management services continued to be numerous. More people received woodland examination and timber marking services than ever before.

During the year the Commission's nursery at Wedgefield, S. C. produced over 32 million forest tree seedlings—more than was produced by any other single nursery in the United States.

Educational activities continued in an attempt to supply the increasing demand for these services. Forestry instruction by Vocational Agriculture teachers and foresters for the Commission resulted in many excellent school forest and home forestry projects. Students seemed to take more interest in forestry than ever before. News releases, leaflets, booklets, talks, motion pictures and other educational programs played important roles in carrying forestry information and problems to the people.

Summary statements of progress made during the past year within the several branches of forestry and parks follow.

### **Forest Fire Protection:**

The South Carolina State Commission of Forestry furnishes assistance to every landowner in the state in protecting his wood-

land from fire. The Commission employs only 347 men and women to prevent, detect and fight fire on 11,300,000 acres of woodland in the state. It can easily be seen that this is only a skeleton force. It is the responsibility of the Commission to assist any landowner with equipment, "know how" and trained leadership in stopping fires on his property. The landowner must, however, continue to prevent fire, and to assist with fire suppression by furnishing the necessary manpower to do the job.

With only 347 people charged with such great responsibility, it is evident that they must be well trained. Training is an important activity of the fire control branch of the Commission of Forestry. During the year, a total of 2,058 meetings were held in the state where training and instruction in forest fire protection work was given. State-wide, district-wide, county unit, community and landowner type meetings were held with various protection forces holding and taking part in the meetings.

The small protection force must have excellent communications so that fires may be reached more promptly and so that no time is wasted. Telephone construction is almost complete, but the radio facilities are not. During the year, 23,000 man-days were wasted because wardens and rangers had to stay close to telephones waiting for calls notifying them of fires. If these men had been equipped with radio they would not have had to remain at home and in offices and could have gone out and attended to numerous jobs such as telephone line building and maintenance, equipment checks and maintenance, personal contacts with landowners to prevent fires and numerous other activities. Two-way radio installations have been initiated in only twenty-four counties. This equipment must be installed in towers and motorized equipment in every county in the state before we have adequate fire protection.

During the year, light crawler-type tractors replaced a few wheel type tractors. The crawler-type is more efficient and should replace all wheel-type tractors. Heavy crawler-type tractors must be purchased so that fires in the heavy fuel types of the coastal plains may be more efficiently fought.

This past year, 5,166 woods fires burned 91,668 acres of woodland. The acreage burned was .78 of 1% of all the woodland in the state. Considering a dry and windy January and March, this is a creditable record. However, it is possible with more





Lookouts serve as the eyes of forest fire fighters. A complete radio communication system is needed to connect all towers, motorized equipment and other installations so that fire fighters may be quickly contacted and sent to fires.



and better equipment to cut this down to one-half of one percent. Then, the state will have adequate forest fire protection.

### **Forest Management:**

South Carolina is potentially a great timber growing state. With long growing seasons, soil suitable for growing timber, and our adequate rainfall, our forest area should grow an average of 300 to 400 board feet per acre per year. We are now growing only about 100 board feet per acre per year as a result of inadequate fire protection and poor cutting practices.



All wood using industries, large and small, must have a continuous supply of timber. Good cutting methods, reforestation and complete forest fire protection are needed to furnish South Carolina's 1600 primary wood using industries with raw material.

Complete fire protection, good cutting practices on all woodland and planting forest tree seedlings on areas that will not reseed is essential before the woodlands of the state will produce the maximum amount of wood.

The Commission of Forestry and the U. S. Forest Service co-operated in completing a resurvey of the forest resources of the



state published April 15, 1949. This resurvey shows that we have cut 3 billion board feet more than we have grown during the eleven years from 1936 to 1947.

Over cutting is particularly severe in the Southern and Northern Coastal Plain. The drain in the Piedmont is practically balanced by the growth. To supply South Carolina's forest industries with wood requires 5 million cords or  $11\frac{1}{2}$  billion board feet or timber a year. With woodusing industries expanding and our timber supplying shrinking the *must* in the forest economy of South Carolina is to grow more timber.

The Forestry Commission, through its forest management branch, will assist any landowner in the state with his timber problems. During the year 706 woodland examinations were made on 126,600 acres of forest land, and a total of 22,009,336 board feet and 4,429 cords were selectively marked for 235 landowners on 13,768 acres of forest land. Foresters of the Commission performing this service assisted more landowners this year than ever before.

Almost 32 million seedlings were produced by the Forestry Commission and distributed to 2,717 South Carolina landowners during the year. The number of seedlings produced represented a national record for 1948. Large orders were reduced so that more small orders could be filled. In spite of this, many small orders remained unfilled.

During the year 6 state forests comprising 130,691 acres were administered by the Forestry Commission.

Work on management plans started during 1946-47 was completed on Poinsett State Forest and about  $\frac{3}{4}$  was completed on Sand Hills State Forest.

Many activities including tree planting, release cuttings, sale of forest products, pruning, and eradication of scrub oak were carried out on state forests during the year.

#### **Public Relations:**

All personnel of the State Commission of Forestry have a public relations responsibility. In addition to their technical duties, they carry on an educational program. They make personal contacts, write news releases, hold forestry demonstrations, show motion pictures, assist with F. F. A. School Forests and carry on many other educational activities for school and





School forests are used as outdoor classrooms for teaching forestry to vocational agriculture students, veterans farm classes and other groups. This program must be expanded so that there will be at least one school forest in every county in the state.

adult groups. This phase of the Commission's operation must be expanded to utilize all appropriate media for developing the full appreciation of forest values South Carolina offers.

This is important because our forests are essential to the livelihood and well-being of the people of the state. Our people must know that because of wild fire and bad cutting in the past, our woodlands are only about 1/3 productive. They must understand that it will take complete protection from wild fire, good cutting practices and the reforestation of more than one and one-half million acres of idle land before our forest can become fully productive. They must be told that they have a part to play in making our forests fully productive.

It is the public's responsibility to prevent and fight fires—to see that their timber is cut wisely—to plant trees on idle land. They must know the best way to do these things.



They must know about the 19 wonderful state parks that will always welcome them. State parks have become well known as recreational centers. Not so well known are the educational possibilities that they offer. As out of door classrooms they offer excellent facilities for teaching conservation and for the development of a deep sense of appreciation of the natural world in which we live.

This, then, is the responsibility of the public relations branch of the Forestry Commission—to place forestry and park information and problems before the people of the state.

The public relations branch has made good progress along these lines. Over 2,000 educational forestry quizzes were held in schools during the year. Field and Columbia office forces prepared and released 834 news articles. Over 2,000 talks on forestry were made. Forestry movies were shown to over 70,000 people. A Conservation School for Club Women was held. Foresters of the Commission and Vocational Agriculture teachers worked closely together on a fine school forestry program. Thousands of pieces of forestry literature were distributed. These are a few examples of the work of public relations.

Progress and work accomplished was not enough. Existing personnel and facilities are insufficient to comply with the ever increasing demands for these services to do the job properly. The public relations branch must be expanded if South Carolina is to take full advantage of the economic and recreational potential of its 12 million acres of forest land.

### **State Parks:**

State parks continued to serve as playgrounds and outdoor classrooms for the people of the state. The polio epidemic kept attendance records from being broken. Although in the face of this scare state parks played host to 1,383,779 people during the year.

There is something to interest each member of the family at all state parks. People may picnic, swim, fish, boat, play games, hike or just relax and rest. Mothers and fathers feel free to let their children swim under the watchful eye of trained Red Cross lifeguards.

Many groups are using state parks as outdoor classrooms for teaching conservation, nature and history. These undisturbed areas offer excellent teaching material on many subjects.





State parks offer healthful outdoor recreational and educational facilities to people of all ages. Parks must be further developed to meet the demand of the people.



The outstanding event of the year was the opening of two new parks—Croft State Park in Spartanburg County and Santee State Park in Orangeburg County.

During the year picnicking and barbecue shelters were completed at Chester, Greenwood, Hunting Island, Paris Mountain, Santee, Sesqui-Centennial and Table Rock State Parks. Large concrete swimming pools were opened at Croft and Rivers Bridge Confederate Memorial State Parks.

Permanent type groins of creosoted timbers for erosion control are being constructed at Edisto Beach and Hunting Island State Parks.

Other construction completed includes a new family cabin at Edisto Beach State Park.

Existing facilities must be expanded to serve all the people using state parks. Two more areas—one on the eastern Pee Dee section and one at the Clark Hill project are needed before all sections of the state can be adequately served. Additional areas must be developed to meet the needs of our colored population. Facilities in existing Negro parks must also be expanded to meet the need.

#### **Personnel:**

Although there were a number of personnel changes in both Divisions of Forestry and Parks occasioned by resignations and transfers, performance as a whole continued on the same high level. When such changes occur, the continuous training program carried on by the Commission is most helpful in making replacements with a minimum loss of time and effort.

With the resignation of Mr. C. H. Schaeffer to enter private business on November 25, 1948, the position of Associate State Forester has been vacant since that time.

Mr. E. B. Price was promoted from Management Assistant to the position of Assistant State Forester, Management, following the resignation of H. F. Bishop to enter private business on September 16, 1948. On November 1, 1948, Mr. E. C. Pickens was promoted from District Forester, Spartanburg District, to Management Assistant, Columbia Office, to fill the vacancy occasioned by Mr. Price's transfer.

Mr. J. R. Tiller was promoted from Fire Control Assistant, to Assistant State Forester, Protection, replacing J. C. Blake-

ney who resigned on December 10, 1948, to enter private business. Mr. John M. Shirer, District Forester, Kingstree, was promoted to Fire Control Assistant, Columbia Office, following Mr. Tiller's transfer.

Mr. W. J. Barton, Asst. Forester, Camden District, was promoted to Columbia Office as Public Relations Assistant on November 1, 1948.

Mr. Howard R. Scott, Asst. Forester, Kingstree District, was promoted to District Forester, Kingstree, following the transfer to Mr. Shirer to the Columbia Office.

Mr. E. L. Middleswart, Asst. Forester, Spartanburg District, was promoted to District Forester, Spartanburg, following the transfer of Mr. E. C. Pickens to the Columbia Office.

With the resignation of Mr. P. R. Plumer, Mr. C. West Jacobs, former Head, Recreation, was promoted to the position of State Park Director; and Mr. E. R. Vreeland, Superintendent, Kings Mountain State Park, was promoted to the position of Assistant Park Director-Operations, Columbia Office, on November 1, 1948.

Many other personnel changes occurred among other technical and non-technical personnel in district offices, in the state parks, and unit fire control organizations.

### **Recommendations:**

South Carolina's second largest source of income is from forest products. On April 15, 1949, a report of South Carolina's forest resources was published by the Southeastern Forest Experiment Station and the State Commission of Forestry. It covered the eleven year period from 1936 to 1947. The facts; (1) Cutting has exceeded growth by 10%. (2) The average size tree is 15% smaller than the average in 1936. This means a decline in grade of the product. (3) Cull timber has increased in proportion to merchantable timber. One out of every five trees is a cull. (4) Inferior species of timber are taking over many areas once occupied by quality timber. (5) Forest land acreage determined in 1947 was more than one million acres greater than in 1936. The increase occurred chiefly in the Piedmont where a large amount of agricultural land reverted to forest. Forest fire protection permitted young timber to become established. (6) More than 1,500,000 acres of idle or unproductive



forest land, best suited to production of forest crops, must be planted to trees before it will produce commercially valuable timber.

The effect; (1) The state's second ranking industry, forest products, is threatened. (2) The economy of South Carolina has been largely geared to forest production, and it is threatened. (3) The demand for forest products continues fairly steady. (4) Because of the present status of forest resources in South Carolina, no further expansion of forest industries should be attempted until the forestry picture improves.

Recommendations; (1) Cutting practices and closer utilization to prevent waste must be improved by education and forest management assistance to private landowners and operators in order to build up the quantity and quality of the forest resource to provide for fluctuations and emergency demands, and to sustain present industry and provide for future expansions of industry. (2) Reforestation must be further expanded to bring cut-over, burned-over, and idle land back to productivity within a reasonable length of time. (3) The achievement of state-wide forest fire control resulted in the establishment of only the *basic* frame-work needed for adequate protection. It alone will not provide South Carolina with adequate protection. A tentative standard by which this is judged is that fire losses must be held to one-half of one percent of the total forest area for any five-year period. At present the average loss is more than one and one-half percent. Cost estimates used by the federal government as a basis for the allotment of funds to South Carolina are prepared only once every five years. A new estimate has just been completed for the period 1950-55. This cost of adequate protection for South Carolina is 12.4 cents per acre. South Carolina has reached its peak in the allotment of federal funds. There is every indication that these funds may be seriously reduced as other states qualify for more funds by virtue of allotments being contingent upon the increase in state appropriation. Unless more federal money is appropriated, the increase to other states will be made at the expense of South Carolina forest fire protection. Reducing forest fire losses in the state to one-half of one percent can only be accomplished by an increase in state appropriation to offset loss of federal funds and to meet rising costs of operation. Immediate needs to intensify protection of forests from fire are: Salaries of county personnel must be raised

for effective work; the use of heavy mechanical fire fighting equipment must be expanded and provision made for replacement and maintenance of other equipment; two-way short wave radio communication facilities must be extended to all counties in the state; educational activities regarding fire prevention and landowners' responsibility of actively assisting the regular suppression organization must be strengthened. This additional equipment and these facilities can only be realized through an increase in the fire control budget to 12.4 cents per acre, per year. (4) Educational programs on all phases of forestry work must be expanded to teach all of our people the value of our forests. Specific groups need more specific training and information on the proper methods of growing and harvesting forest crops.

Every year the demands of our people for state park facilities exceed that of previous years. The state parks provide a rare opportunity for the entire family—our people of all ages—to enjoy the wholesome recreational and educational facilities.

The precarious status of our forest resources shows the need for expanded educational activities. State parks, through organized day camps, group camps, and facilities for day use, provide an excellent out-of-doors classroom for natural resource education.

These facilities must be expanded in the nineteen existing state parks.

Additional parks are needed where population pressure shows the need. At present, there are the Clark Hill, Pee Dee, and Charleston areas.

Additional areas must be developed to meet the needs of our colored population. Facilities in existing Negro parks must also be expanded to meet the need.

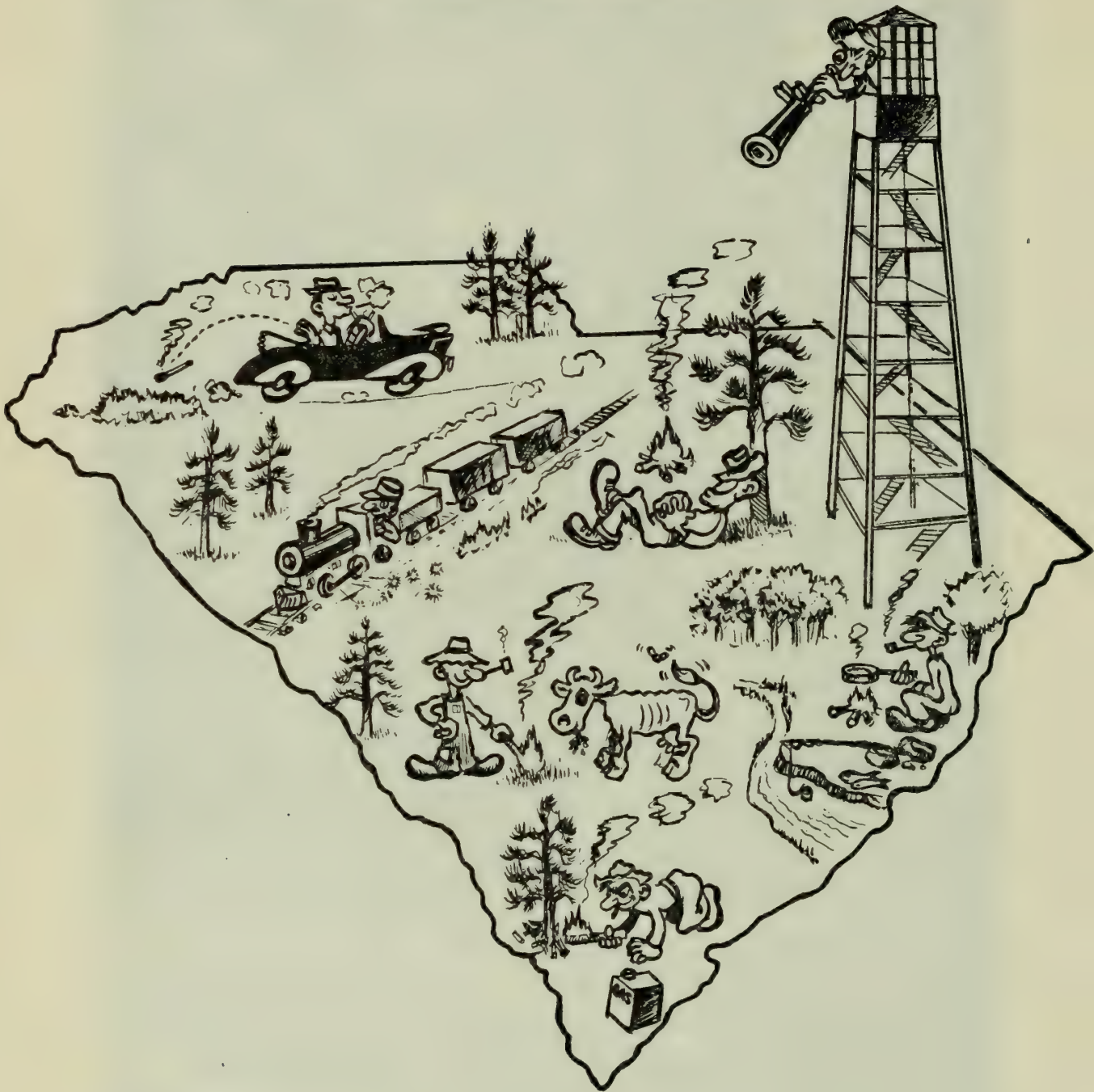




A State park is a refuge for man and nature. Here the entire family enjoys wholesome recreation



4950 OUT OF THE 5000 ANNUAL WOODS FIRES IN  
SOUTH CAROLINA



ARE CAUSED BY PEOPLE

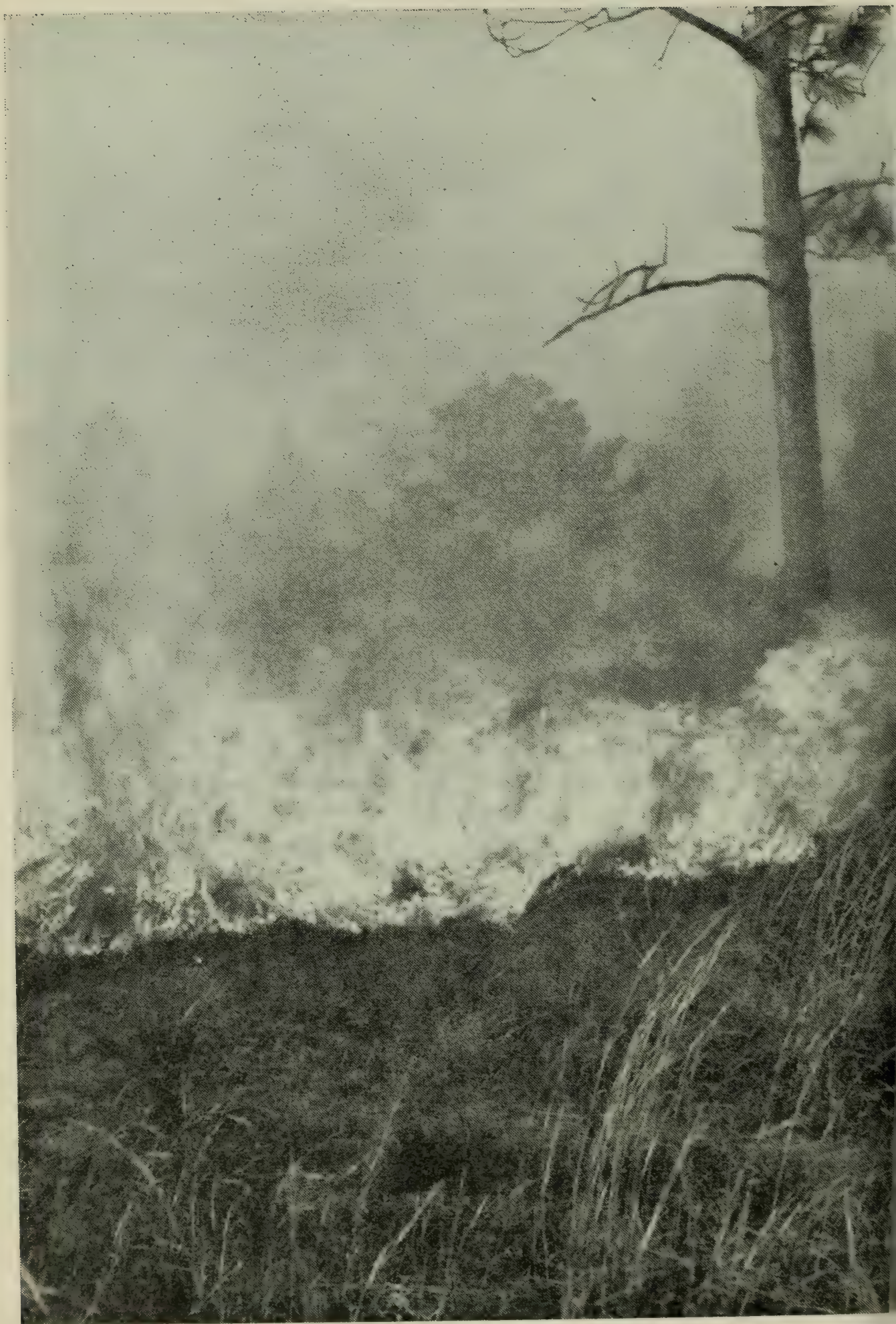


## FOREST FIRE PROTECTION

Following a forest fire protection plan conceived in 1928 by the Commission of Forestry for ultimate achievement, the Branch of Fire Control has, for the third year, furnished forest fire protection assistance to all landowners of South Carolina. State-wide forest fire protection was not merely accomplished through legislative action in 1945, but rather only after long years during which many landowners struggled to control destructive forest fires and in so doing created a sentiment among the people of the state favoring adequate protection of all woodland areas.

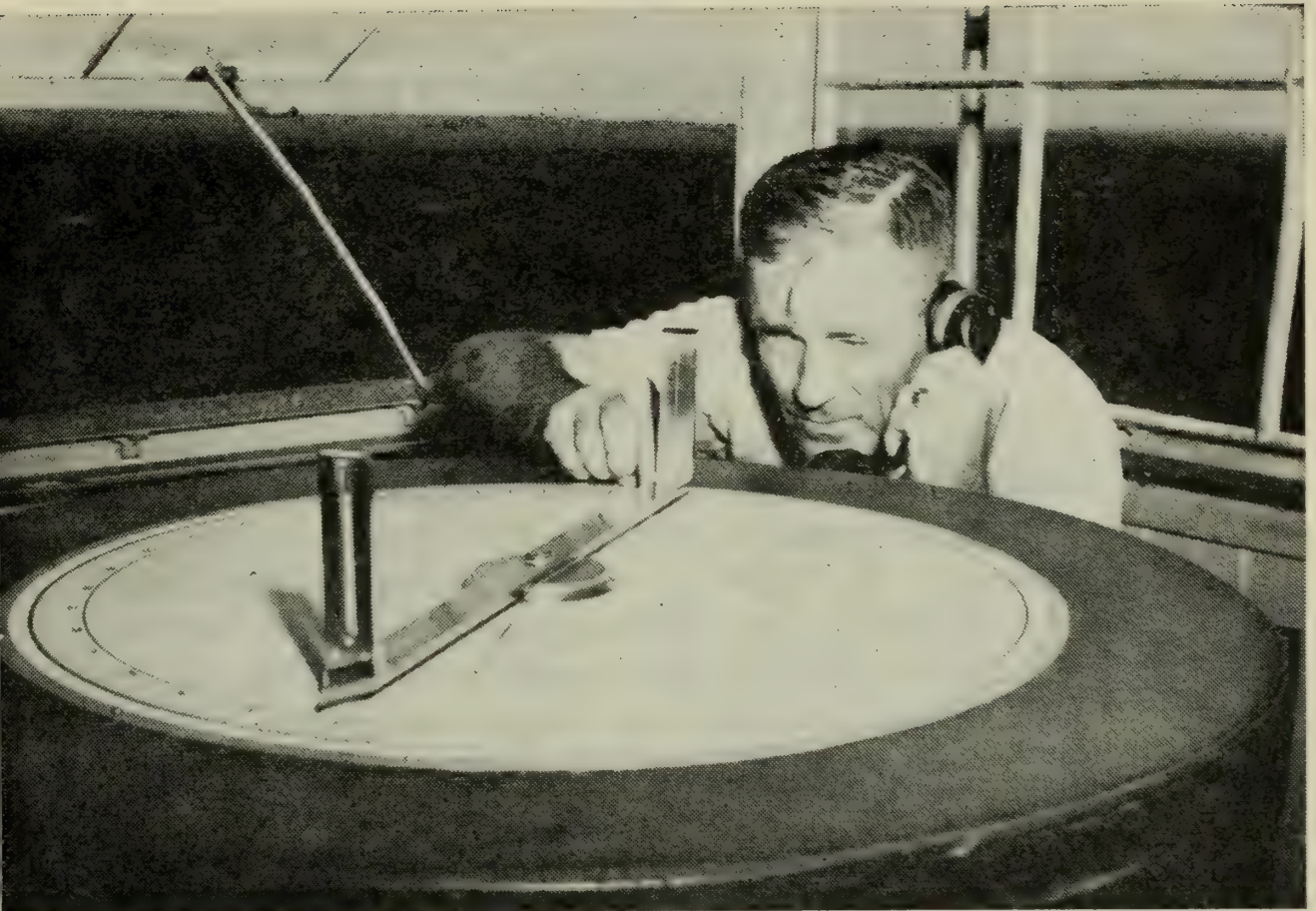
While state-wide protection was authorized during the 1945 Session of the South Carolina General Assembly and much of the basic work of organizing state-wide system of protection has been completed, we have not yet attained *adequate* protection. The bulk of the field organization is complete. Still, one very important post in each of the forty-six county fire protection units is unfilled—that of dispatcher, who would guide and coordinate all of the activities of the suppression organization from the county ranger's office. The permanent improvements program for fire control is nearly complete. There is urgent need, however, for certain protection unit facilities, particularly concerned with the maintenance of equipment and hand tools. Frequency modulation, two-way radio equipment installation has been initiated in only twenty-four counties. The equipment installed constitutes a bare minimum; no equipment has been installed in the remaining counties. Installation of two-way radio in all towers and motorized equipment in the state is absolutely essential to greater efficiency in forest fire prevention and suppression work. A few of the light wheel-type suppression tractors were replaced during the latter part of the year with light crawler-type tractors to give greater efficiency to fire suppression with motorized equipment. All of the light wheel-type tractors must be replaced, and additional heavy crawler-type tractors must be purchased to assist in the suppression of fires in the heavy fuel types of the coastal plains. These and other protection needs constitute the greater efficiency required to furnish landowners of the state *adequate* protection from uncontrolled forest fires.



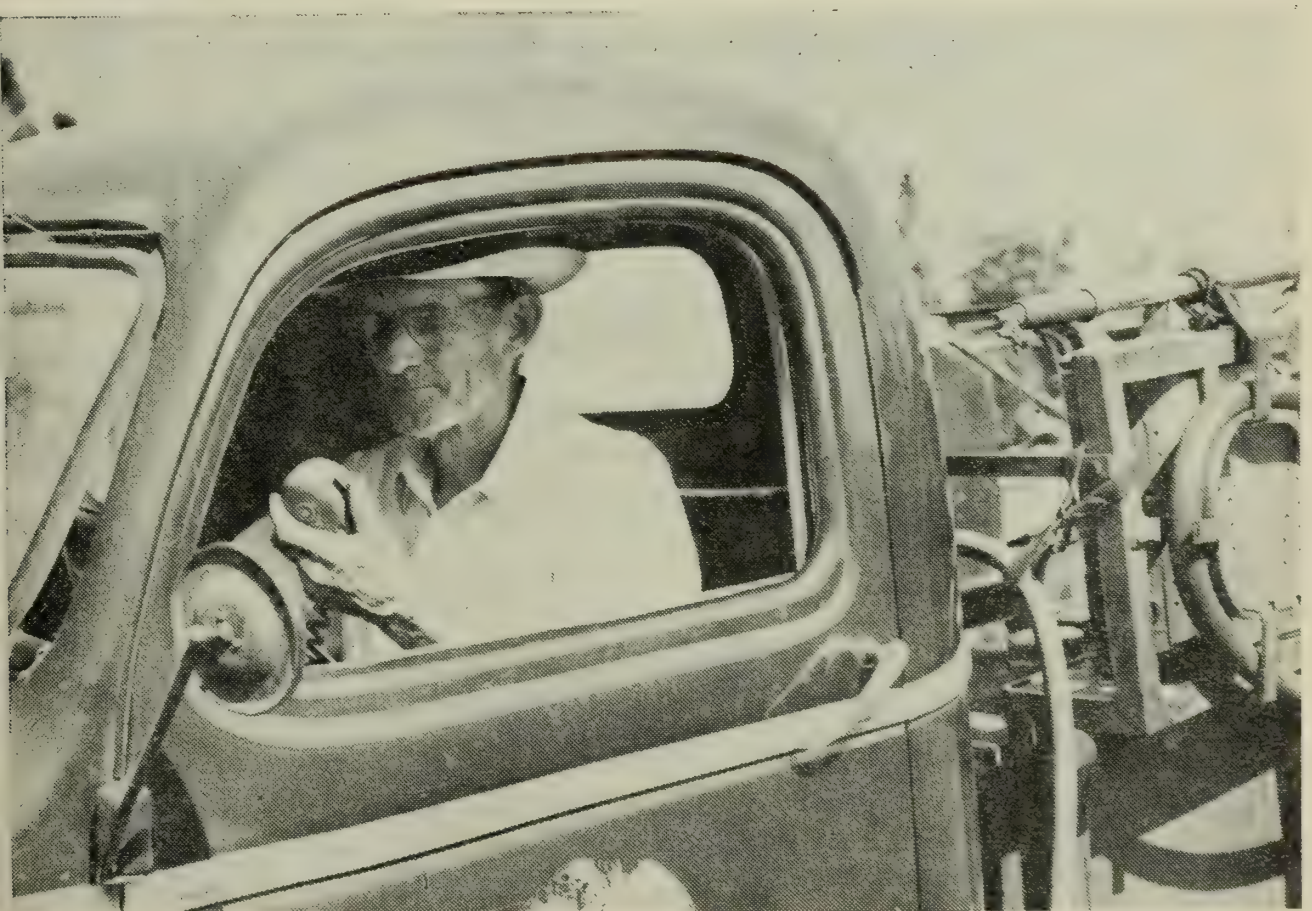


Fires are easier to fight if they are reached soon after they start. Time lost means more timber lost. Two-way radio saves time.





Lookout towermen in towers equipped with two-way radio are able to notify the ranger of fire no matter where he might be in the county. Only 24 out of 134 towers are equipped with radio.



On high fire hazard days a ranger must stay close by a telephone if he has no radio in his truck. If his truck is equipped with radio he is free to go anywhere in the county and do telephone construction and maintenance work, fire prevention work and many other jobs. Radio is needed in all towers and motorized equipment before we can have adequate and efficient fire protection.



Despite its many needs with which to do a more efficient protection job, the forest fire control organization continued to direct its activities toward exclusion of wild fires from South Carolina's woodlands. The following pages describe in some detail the Commission's fire protection organization and its activities and accomplishments during the fiscal year 1948-49.

### **FOREST AREA PROTECTED**

The total area of state and private forest lands on which the Commission of Forestry is cooperating in furnishing fire protection amounts to 11,300,008 acres. This figure includes 154,822 acres of forest land in State Forests and State Parks. All fire protection statistics included in this report for county fire protection units include those State Forests and State Parks located within the county units.

The area of forest land under statewide fire protection does not include 584,492 acres within national forest boundaries which are protected by the U. S. Forest Service, nor does it include 58,100 acres of woodland under the jurisdiction of, and protected by, other federal agencies.

### **FOREST FIRE PROTECTION ORGANIZATION**

The entire Fire Control formula of South Carolina has as its basis the theory that the landowner is the steward of his lands and that, as such, he retains the responsibility for the forest management practices carried out on his lands. The responsibility for prevention and control of forest fires in his woodlands, therefore, lies with the landowner. The Fire Control organization of the Commission of Forestry is designed to furnish him assistance in the form of trained leadership and equipment in preventing forest fires and in suppressing those fires which occur.

#### **County Units:**

The administration of all protection units in the state is under the direct supervision of the seven District Foresters. Within each county protection unit, a Unit Ranger heads up a small organization which carries out all of the fire protection activities within the county. The Ranger is assisted by one to five fire wardens, depending on the size of the county, the amount of



forest land, and the fire hazard existing within the county, whose job it is to assist with prevention and control of forest fires. Lookout towers are strategically located within each of the counties, each being manned by a towerman whose primary job is detecting, locating and reporting fires. Tractor and plow equipment has been made available to the counties throughout the Coastal Plains and Sand Hills where the forest fire hazard is greatest. These suppression units are manned by tractor operators who are employed on a part-time basis. All of these regular personnel of the protection unit organization are connected with each other by a communications system consisting of telephone, and in some cases, two-way radio.

Volunteer fire crews are organized and trained in each of the communities within the county. These crews assist the regular organization in organizing the community in fire prevention and assist in suppressing wild fires with equipment distributed to them by the Commission. During high fire hazard conditions, as measured by the Commission through a statewide system of fire danger measurement stations, the Rangers may employ several men who are organized into flexible fire crews to supplement the regular personnel in fire suppression. These personnel are employed infrequently and for short duration.

In each of the county protection units, there is set up in accordance with the Statewide Forest Fire Protection Act a County Forestry Board consisting of five citizens of the county interested in the advancement of forestry and fire control. The Boards serve in an advisory capacity to the Commission and assist in guiding the protection program within the county.

All county units cooperate closely in connection with reporting and suppressing forest fires adjacent to county lines.

### **State Forests and Parks:**

County unit organizations assist in the protection of all state lands, both State Forests and Parks. As is the case with other landowners, forces maintained on the State Forests and Parks are responsible for protecting their areas and for rendering all assistance possible to the county fire control organization in both the prevention and suppression of forest fires on or adjacent to their lands.

The combined forest acreage of all State Forests and Parks is 154,882 acres.

### **National Forest Protection:**

Fire protection on the 584,492 acres of National Forest land in the state is provided by the U. S. Forest Service with its own forces and equipment. These two National Forests are the Francis Marion National Forest located in the Lower Coastal Plains and the Sumter National Forest located in the Piedmont and mountains.

### **Cooperative Agreements:**

In order to coordinate forest fire protection work on private forests and National Forest lands adjacent thereto, cooperative agreements are in effect between the U. S. Forest Service and the State Commission of Forestry. These agreements place responsibility for protection of the forest lands on the agency having the greater forest protection area in the immediate vicinity of the property in question.

## **PROTECTION PERSONNEL**

There continues to be a considerable turn-over in various positions below the ranger level. This may be mainly attributed to the Commission's inability to provide salaries comparable with salaries for other similar jobs. All county units, however, were kept completely organized throughout the year, with replacements being made immediately as vacancies occurred.

No material change over that of the previous year was made in the number of persons regularly employed in connection with fire protection work. There was some reduction in the number of persons employed in flexible crews during the year. A total of 710 persons were employed on either a full time or part time basis. This number includes 46 rangers, 1 assistant ranger, 132 fire wardens, 35 tractor operators, 134 towermen, and 19 retainer fee crew members and 344 flexible crew members.

In addition to the regular organization, the number of organized volunteer crews was increased, bringing up the total number of persons so organized to 3,681. Also, 5,976 other persons voluntarily assisted the regular unit organization in forest fire suppression in their respective communities. In all, 10,367 persons were engaged in one way or another with forest protection work with the Commission of Forestry during the year, nearly doubling the number of persons assisting in fire protection



work during the previous fiscal year. Despite this increase, it is essential to reduction of acreage burned by fires that occur that landowners provide increased manpower in fire suppression.

## **FIRE PROTECTION ACTIVITIES**

### **Training:**

Training for regular protection personnel, as well as organized volunteers and other persons, was intensified during the year with good results. The trainees responded exceptionally well to the training given them, resulting during the year in greater efficiency in fire protection work, savings in time, and a reduction in the acreage losses and funds expended.

In all, a total of 2,058 meetings were held in the state where training and instruction in forest fire protection work was given.

Statewide, District-wide, county unit, community, and landowner type meetings were held, with the various protection personnel participating. All supervisory personnel, including the unit rangers, participated in these meetings as instructors. Instruction included all phases of fire protection work and equipment.

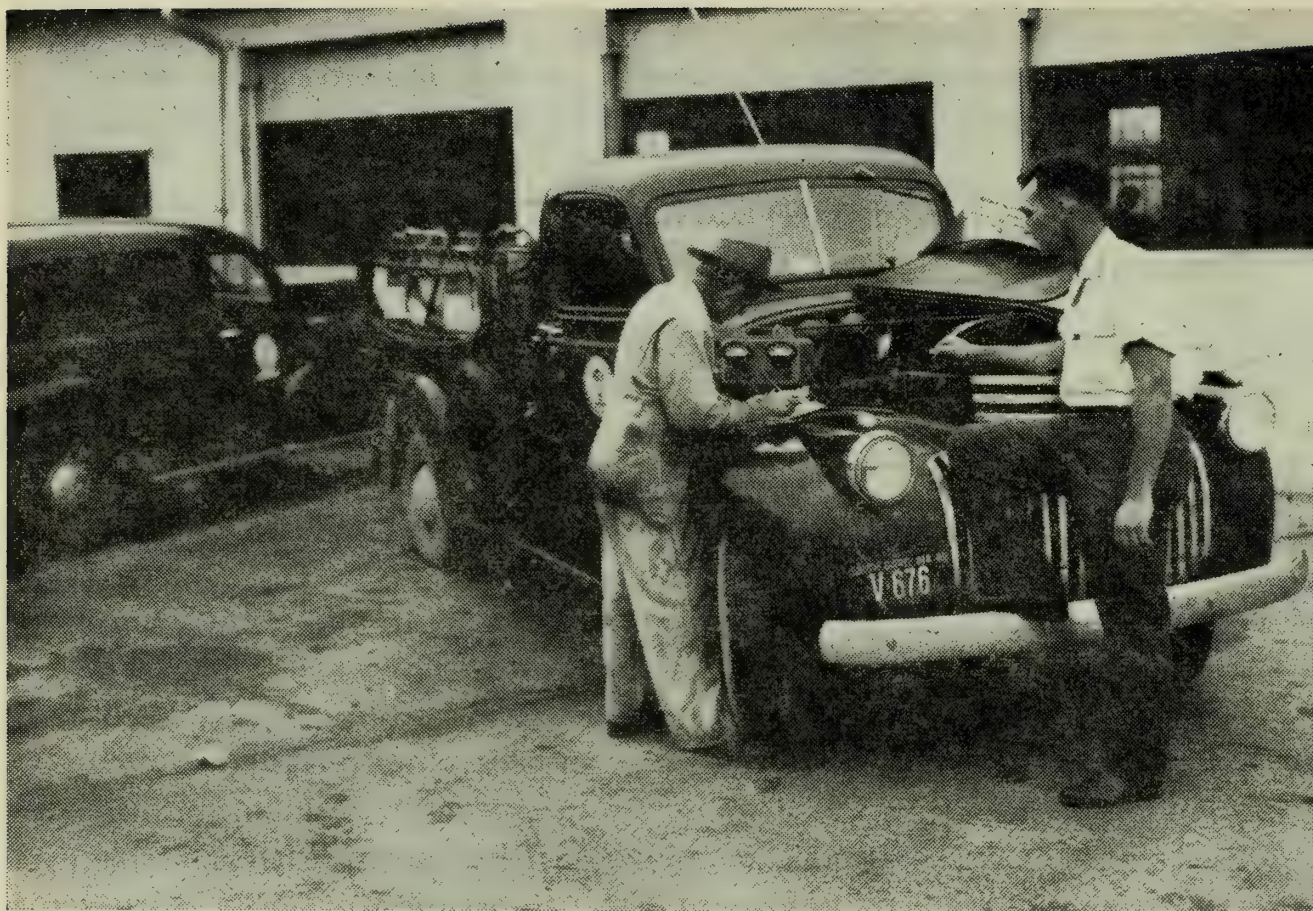
Special mention should be made of small group community meetings which were held in some of the communities in the state. In every instance where this type meeting was held with the landowners, forest fire occurrence in that community ceased or was greatly minimized. Also, this type meeting gave the organization a better chance to work directly with the landowners on their specific protection problems.

### **Inspection:**

During the year, detailed inspections of county unit organizations and operational efficiency were made periodically by both personnel of the District and Columbia Offices. The purpose of these inspections was to determine the efficiency of all fire control activities within the unit and outline corrective measures necessary to bring the organization up to prescribed standards.

Shortly after each inspection, the unit ranger is furnished with a detailed report specifically outlining all existing discrepancies and recommendations for improving the overall efficiency of the fire control unit. Follow-up inspections were made to insure that all recommendations were carried out.





Periodic equipment checks are made by traveling mechanics to insure that fire fighting equipment all over the state is kept in the best of shape.

In addition to the regular district inspection of county units, inspections of Cherokee and Clarendon counties were made by Columbia Office personnel.

To insure proper operation and maintenance of all motorized equipment, periodic inspections were made by traveling mechanics who stressed the importance of keeping the various unit equipment ready for routine and emergency fire calls at all times.

### **Fire Plans:**

For each of the counties, State Forests and State Parks, fire plans have been prepared and put into use. After one year of operation under these fire plans, however, certain revisions are recommended in order to make these plans more workable. A copy of each protection unit, State Forest, and State Park fire plan is available to all protection unit, district and Columbia Office personnel. All information and instructions contained in these plans is coordinated with the overall State Fire Plan. The State Fire Plan is a brief description of the availability of equip-



ment, manpower and materials as may be needed by each of the county units, forests and parks under emergency conditions. This State Fire Plan, likewise, is amended each year prior to fire season, at which time the plan is altered as necessary to coordinate state-wide activities in forest fire control. These fire plans have added immeasurably to the efficiency of fire prevention and control work by the state-wide organization.

### **Fire Protection Job Descriptions and Qualifications:**

Job descriptions and minimum qualifications for the various fire protection positions of the Commission of Forestry, prepared during last fiscal year, were distributed to all personnel concerned and to the County Forestry Boards.

The use of these personnel standards will insure the employment of the highest qualified persons available for the position and will assist in maintaining continued high personnel efficiency.

These job descriptions will also be made the basis of an efficiency rating system to be put into effect for all fire control personnel during the coming fiscal year.

### **Law Enforcement:**

Additional stress was placed on forest fire law enforcement during the year as the best means of reducing the number of willful and careless fires which occur in the state. All illegal fires are carefully investigated by county unit and district personnel in an effort to determine responsibility for the fire. Where sufficient evidence is secured, enforcement of the State Fire Laws is carried out.

A total of 311 persons were prosecuted for setting illegal fires. Of this number, 295 persons were convicted. Thus, there was one prosecution for each 16 fires which occurred in the state.

Florence District led the state with the greatest number of prosecutions and convictions. In this District, a total of 89 persons were prosecuted and 82 persons convicted. However, based on the number of fires occurring in the District, Camden District had the best law enforcement average, consisting of one prosecution for each 9 fires that occurred. Also on this basis, Lee County averaged one prosecution for each 2 fires and Hampton County one prosecution for each 3 fires. Other county units maintaining a high average were Chesterfield, Lancaster, Dar-

lington, Dillon, Horry, Marion, Chester, Newberry, Pickens, and Spartanburg.

Considerable additional work is necessary in this activity by protection unit personnel. Continued cooperation of local magistrates is essential to a more successful law enforcement program.

### **Burning Permit Law:**

The three counties of Greenville, Orangeburg and Aiken have enacted a law which requires that permits be secured by persons who plan to burn brush, fields, and ditch banks adjacent to woodland areas between the dates of October 15 and May 15 of each year. These permits are issued by the county unit organization and certain other designated persons with instructions regarding safety when burning. The unit organization may refuse to issue a permit to burn if the forest fire hazard indicates that such action should be taken.

In these three counties, a total of 4,511 permits were issued during the year. Of this total, only 8 of the fires were allowed to burn areas not intended to be burned by the landowner. Thirty-nine persons were prosecuted in the three counties resulting from violation of the Burning Permit Law.

A more careful attitude toward the use of fire is evident as a result of the Burning Permit Law. In addition, much time and needless fire investigation work is avoided on the part of the unit personnel where burning permits are issued.

It is recommended that a state-wide Burning Permit Law be enacted as an aid in reducing the number of uncontrolled forest fires occurring in South Carolina.

### **Southern States Fire Control Conference:**

Each year following the spring fire season, the Forest Fire Chiefs, their Assistants, and Radio Engineers of each of the eleven Southern States and the U. S. Forest Service offices at Atlanta and Washington meet for a four-day conference on mutual forest fire protection problems and to review new developments in fire fighting equipment. The 1949 Conference was held at Ft. Morgan State Park, near Mobile, Alabama. Much time at this conference was devoted to methods of revising the five-year forest fire control area and cost estimate on which Federal appropriations for fire protection to the states is based.



## IMPROVEMENTS

There was no allotment of funds during the fiscal year for the construction of additional fire control improvements. Activity in this category was confined solely to maintenance of existing improvements. Considerable construction work, however, remains to be done in order that all tower units and other protection facilities be completed as planned for under state-wide fire protection.

Some additions were made to telephone and radio communication facilities in order to increase the efficiency of fire reporting.

### Lookout Towers:

No new lookout towers were constructed during the fiscal year. Two additional fire towers are needed to complete the basic protection system for the state. These two towers are necessary on the former Camp Croft area in Spartanburg County and in the Pineville area of Berkeley County. Steel for one of these towers is on hand, and it is anticipated that it will be erected during the coming fiscal year. There are now 155 lookout towers in South Carolina; 131 are state-owned and operated, 3 privately-owned but state-operated, and 21 are owned and operated by the U. S. Forest Service on National Forests.

### Tower Unit Buildings:

A complete tower unit consists of a lookout tower, dwelling, drilling of well, barn, chicken house and latrine. No new buildings were constructed on towersites during the fiscal year. There still remains to be constructed on the new towersites, acquired by the state in connection with the State-wide Forest Fire Protection Act of 1945, 21 dwellings, 24 wells, and 37 barns and chicken houses.

In addition to new construction, maintenance of existing improvements has become a problem of great concern. It was estimated prior to the beginning of the fiscal year that some \$25,000 was necessary to repair the older tower units, many of them constructed by C. C. C. and dating back to the period 1930-35, in order to bring them up to the Commission's standards of maintenance. Due to limited funds, however, less than half of the funds necessary to repair these buildings could be budgeted.

Maintenance on all tower unit buildings was completed during the year within limitations of funds allotted for the purpose. Many of these buildings, however, remain in a condition of poor maintenance due to the lack of adequate funds with which to repair them.

**Telephone Lines:**

An efficient communications system for reporting forest fires is absolutely essential to a good fire protection program. Much improvement has been made during the past year by bringing older telephone lines up to standard and in salvaging older lines where it was possible to make use of new commercial facilities.

While telephone lines allow for good communication between the detection towers and the fire control organization prior to fire occurrence, the organization has no communication with fire towers or other sources of additional manpower and equipment after a fire occurs. Increased efficiency in forest fire control as concerns the communications system can only be secured through conversion from telephone communication to two-way radio.

Approximately 25 miles of new telephone lines were constructed to connect new fire control personnel with the Ranger's office and the fire towers within the various units. Some 52 miles of telephone lines were salvaged, 78 miles relocated and 25 miles were attached to commercial telephone and telegraphic poles. In addition, 28 fire detection towers and 21 tower dwellings were re-wired, 39 telephone instruments were replaced, 18 new telephones and 8 railroad crossings installed, 145 poles replaced, and 1,661 miles of rights-of-way were brushed out. All of these improvements to the Commission's telephone communication system were done by existing District and County Unit personnel. In addition to the improvements work accomplished, the usual maintenance repair work and "trouble shooting" necessary to keep the lines in good operating condition were done in all counties. During the year, two counties, Colleton and Allendale, were converted to dial operation.

**Radio:**

Purchase and installation of new fire control radio equipment was halted again this year due to the limitation in funds available. However, tower and ranger truck radios were installed in



Williamsburg and Hampton Counties, this equipment having been on hand awaiting commercial power installation at the two towers.

Although some radio equipment is now in use in 24 counties, such equipment constitutes a bare minimum, and is only a very small portion of that actually needed for efficient fire protection. In order to do a thorough job of forest fire protection, the Commission needs radio equipment for 134 lookout towers, 132 wardens, 33 light tractor units, 5 heavy tractor units, 7 district offices, 46 county dispatching offices, 46 county rangers, 7 district foresters, 7 district rangers, 2 traveling mechanics and 5 Columbia Office personnel of the Fire Control Branch.

In April of this year, a comprehensive survey was made with radio equipment operating in 154 megacycles as compared with our present frequency of 32 megacycles. The 154 Mc. equipment is more compact, uses a very short antenna and is not subject to skip interference. During the tests, conducted in Richland, Newberry, Spartanburg and Berkeley Counties, a communicating range of 15 miles truck to tower was consistent and in some cases was even as high as 23 miles. Such equipment has a definite place as a warden's radio in the fire control setup.

During the year, special individual and group training was conducted for radio operators and some revisions made in operating technique in the interest of simplicity, efficiency and the reduction in length of messages.

A continuous maintenance program was carried on and included periodic frequency measurements and the replacement of 6 antennas damaged by lightning and ice.

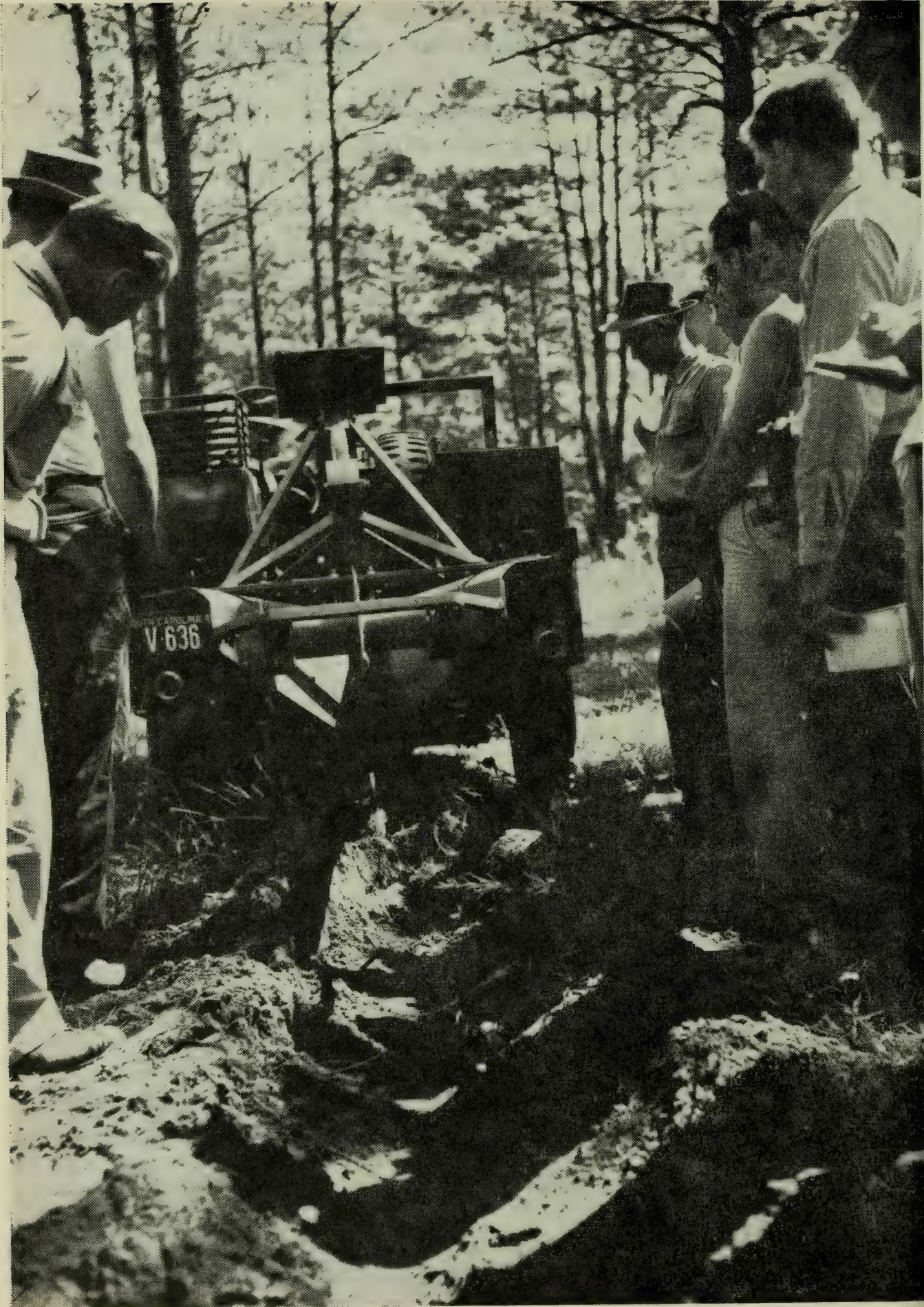
Private industry has shown an increased interest in radio, this being manifested by their purchase of four additional transmitters and eight two-way units this year. There are now 18 units in use by private industry in South Carolina.

When funds become available for completing our fire control radio system, then will our communications begin to take their rightful place as an integral part of an efficient fire fighting organization.

### **Firebreaks:**

Due to a continued curtailment of funds available for fire control work, the number of tractor plow units operated was re-





Each year many forestry demonstrations are put on for various groups. This group of college students are observing a firebreak cut by a plow built in the Commission's Sumter shops and pulled with a 1/4 ton jeep.



duced from the previous year from 4 to 2. This was a further reduction from the six units which were operated in the fiscal year 1946-47. A tractor plow unit consists of a heavy tractor, an Athens 4-disc plow, a Mathis 2-disc plow and a two-ton truck with trailer for transportation of equipment from one property to another. These units plow firebreaks for landowners on a planned schedule in the Sand Hills and Coastal Plains counties.

In order to take advantage of the good plowing weather during the summer, operation of both firebreak units was begun in July. Due to this, a considerable mileage of firebreaks was completed prior to the start of the fire season in October, and by January, the two units had plowed the full mileage of firebreaks allowable due to budgetary reasons. This made the heavy units available on a full-time basis for standby and fire suppression assistance to the county unit organizations during high fire occurrence during the spring months.

A total of 1,608.6 miles of firebreaks were plowed for 152 landowners. Of this total, 300.1 miles were new construction and 1,308.5 miles were maintenance to old existing firebreaks. These firebreaks served to break up extensive woodland tracts into small units for ease in protection work.

Property owners having firebreaks plowed by state-owned equipment paid for this service at the rate of \$7.00 per mile for new construction and \$6.00 per mile for maintenance of old breaks.

A large number of woodland owners plow their own firebreaks each year, using either farm or regular firebreak equipment.

### **Fire Danger Measurement Stations:**

More intensive use was made of the 43 fire danger measurement stations in the state during the past year. More accurate danger predictions were secured through intensive training of the station operators.

These stations are used to determine the class of fire hazard for any given day, the hazard being classified from one to five, with class one being the low fire hazard and class five being the very high fire hazard. Through instrument measurements, such factors as wind velocity, precipitation, fuel moisture, number of days since 1/2" or more of rain, and condition of the lesser vege-

tation are correlated to determine the danger classification on which all activities of the fire control organization are based. In this manner, the fire control organization is always alerted prior to high fire occurrence conditions. Also, the use and size of supplementary fire fighting crews are increased or decreased depending upon fire danger as predicted by the fire danger stations, representing a large savings in fire control funds over former methods of employment.

#### ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

Items	Value
134 Lookout Tower Units .....	\$1,406,430
1,177 Miles of Truck Trails .....	2,942,503
2,348 Miles of Telephone Lines and Instruments.....	718,470
52 Radio Installations .....	50,100
43 Fire Danger Stations .....	3,000
Total .....	<hr/> \$5,120,503

#### EQUIPMENT

A small amount of new fire fighting equipment was purchased during the year. The entire purchase, however, was made for replacement of worn-out equipment. This equipment consisted of seven 3/4 ton pickups for Rangers, four 3/4 ton four-wheel drive pickups for Rangers, and one 2-ton LWB tractor truck. In addition, light plowing equipment in several counties was replaced by the purchase of five 3/4 ton four-wheel drive trucks with plows.

All trucks were equipped with panama pumps and booster tanks, racks for carrying backpack pumps, and backfire torches and other hand tools.



**INVENTORY FIRE TOOLS & EQUIPMENT AND ESTIMATED VALUE**  
**June 30, 1949**

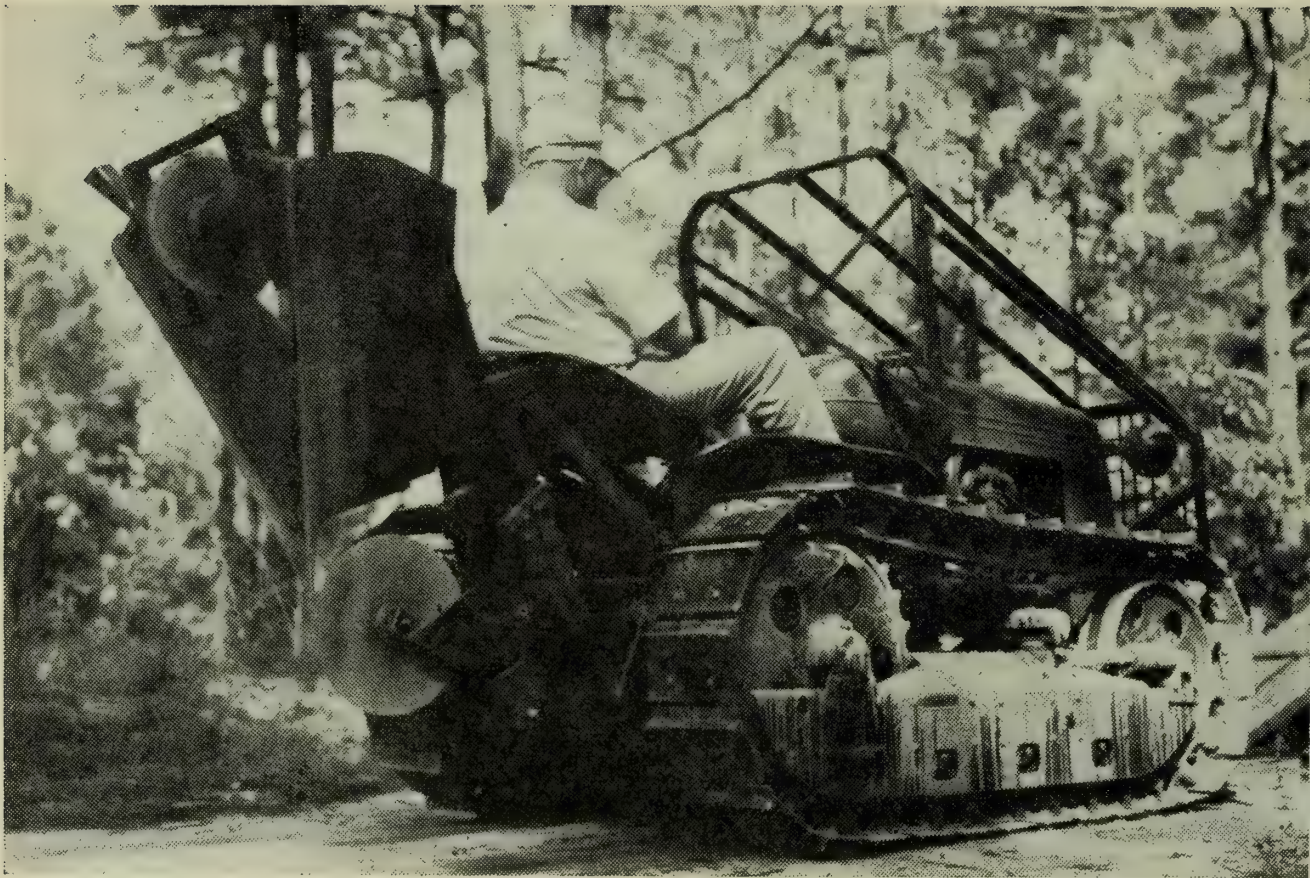
Items	Value
3,187 Backpack pumps -----	\$ 35,057.00
6,927 Fire rakes -----	12,468.60
3,291 Fire swatters -----	8,227.50
5 Heavy crawler tractors -----	27,500.00
6 Light crawler tractors -----	13,200.00
25 Wheel type tractors -----	38,750.00
10 H. D. fire plows -----	7,200.00
5 3/4 ton Jeep fire trucks w/plows -----	11,750.00
2 1/4 ton Jeep fire trucks w/plows -----	4,200.00
47 Ranger pickup trucks w/pumps and tanks -----	86,630.00
32 LWB trucks -----	73,600.00
2 Pickup trucks -----	2,700.00
5 Truck tractors -----	12,500.00
6 Equipment transports -----	13,800.00
12 Light equipment trailers -----	1,650.00
1 28 ft. transport trailer -----	2,000.00
5 Sedan delivery trucks -----	7,000.00
 Total -----	 \$358,233.10

**Equipment Maintenance Shop:**

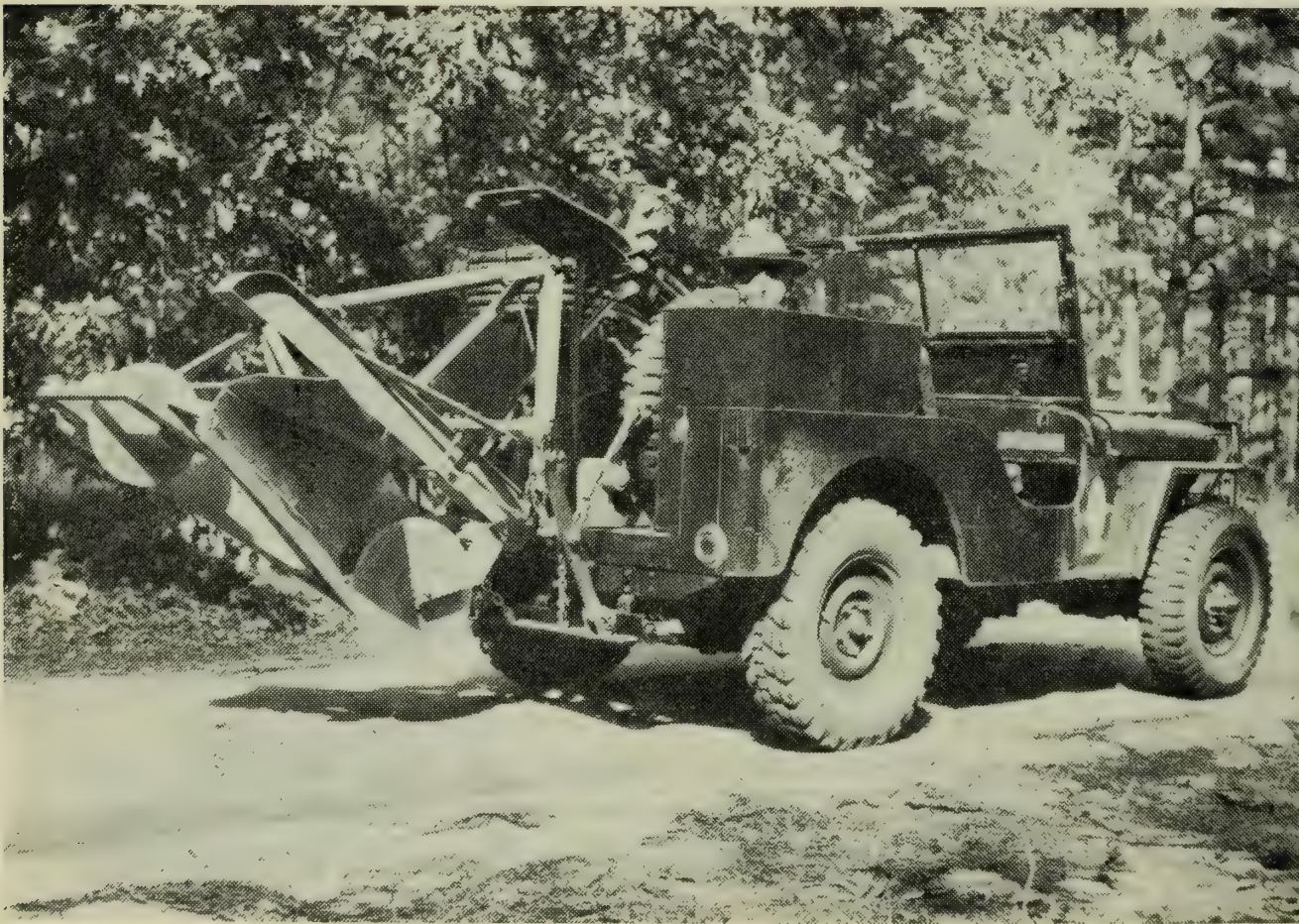
The Branch of Fire Control maintained its central repair shops at Sumter during the past year and continued operations very much as during the previous fiscal year. Three mechanics were employed at the shop to handle shop repairs for fire control equipment. Repairs made in the shops were confined to repair jobs where a material savings could be made by bringing the work in from a limited portion of the state. The predetermination of cost influenced the distance traveled in bringing in a piece of equipment. Also, these mechanics handled at the shop all work of a specialized nature, such as power pump and tank installations and repairs and the development and manufacture of certain specialized equipment and accessories as fire plows, backfire torches and equipment racks.

Three traveling mechanics worked out from the shop over the entire state, one handling heavy fire break and fire suppression tractors and plows, the other two handling all trucks and light tractors and plows.



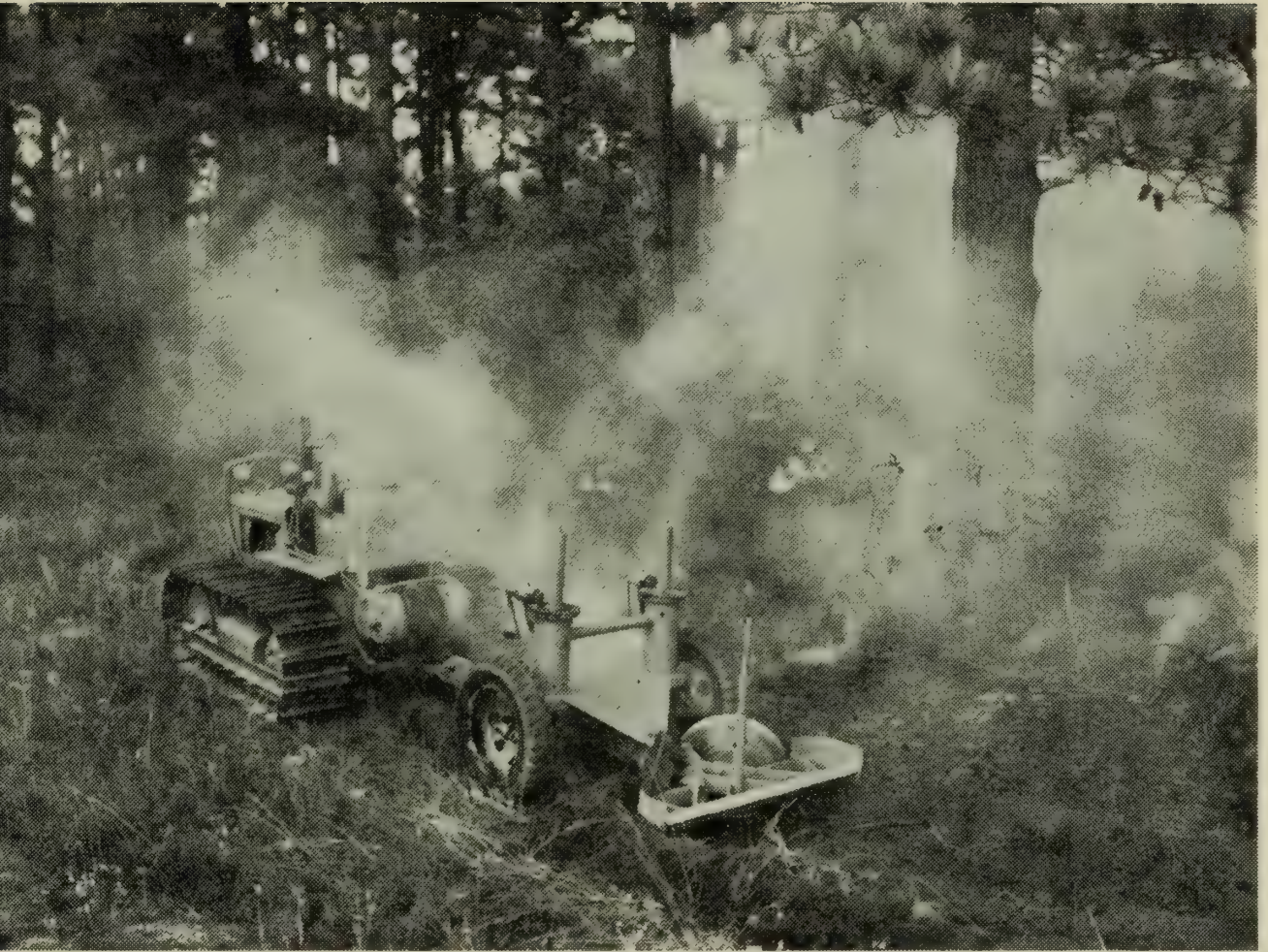


The light Crawler-type tractor. It takes many types of fire fighting equipment to successfully fight fire in the varied forest conditions of the state.

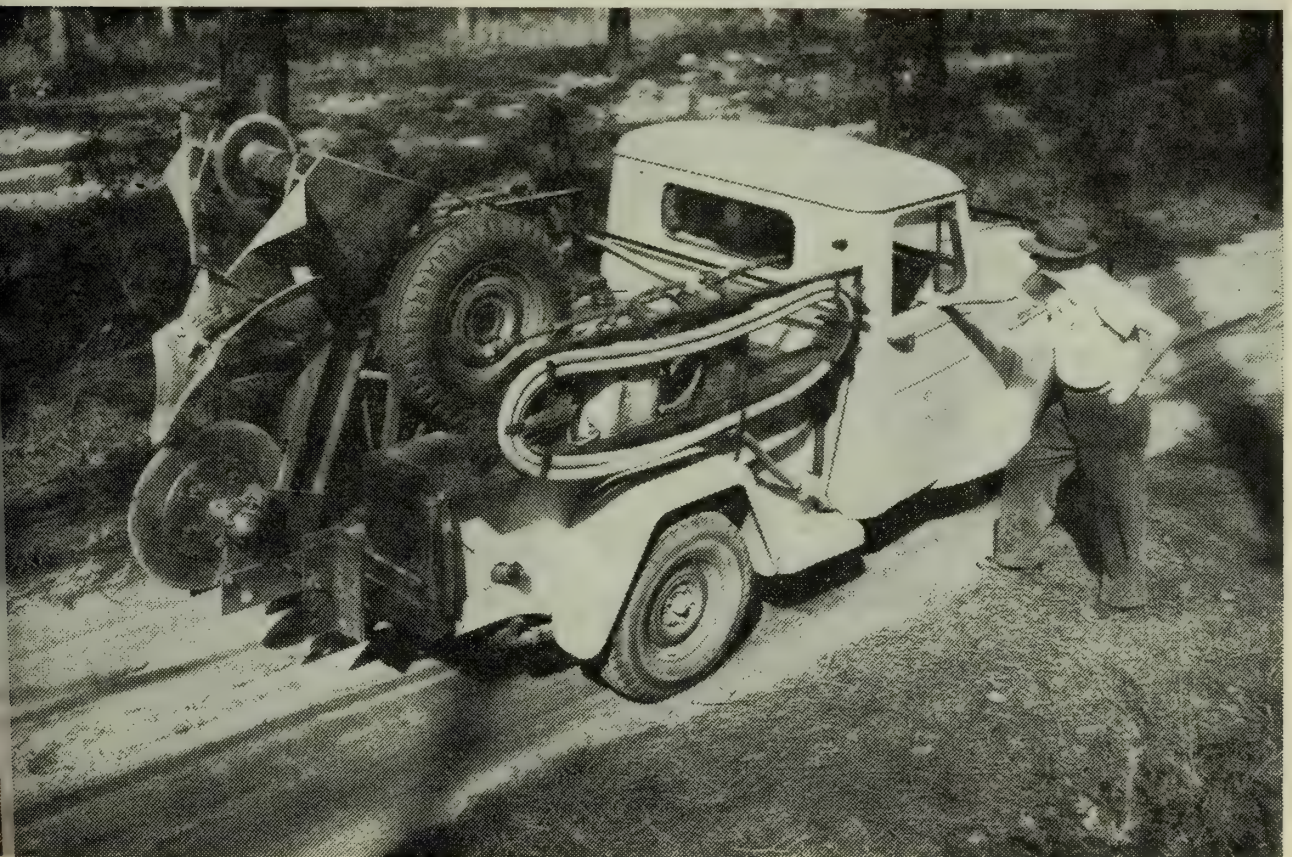


The 1/4 ton jeep.



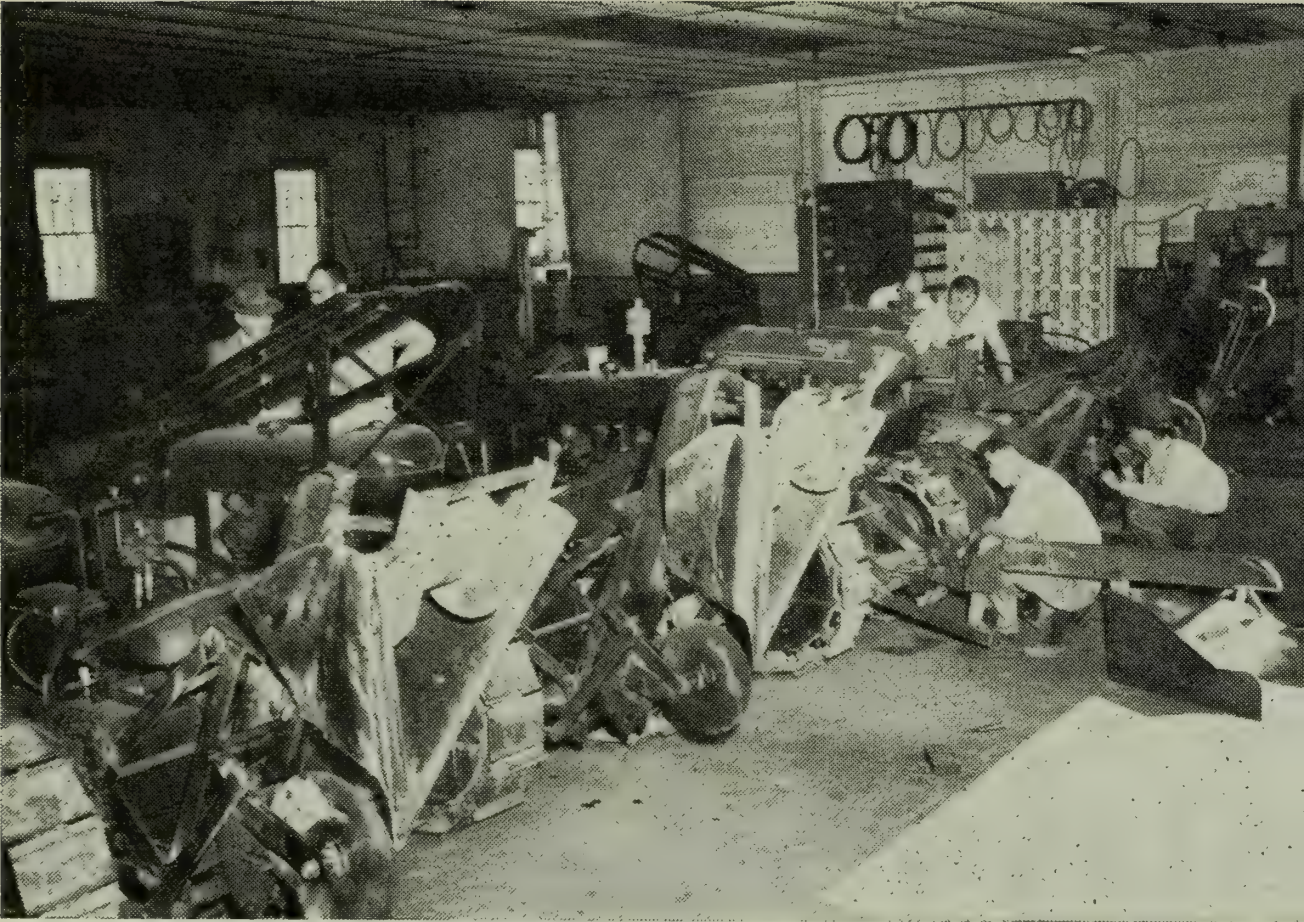


The heavy fire fighting unit. More heavy equipment is needed in the heavy fuel types in the low country.

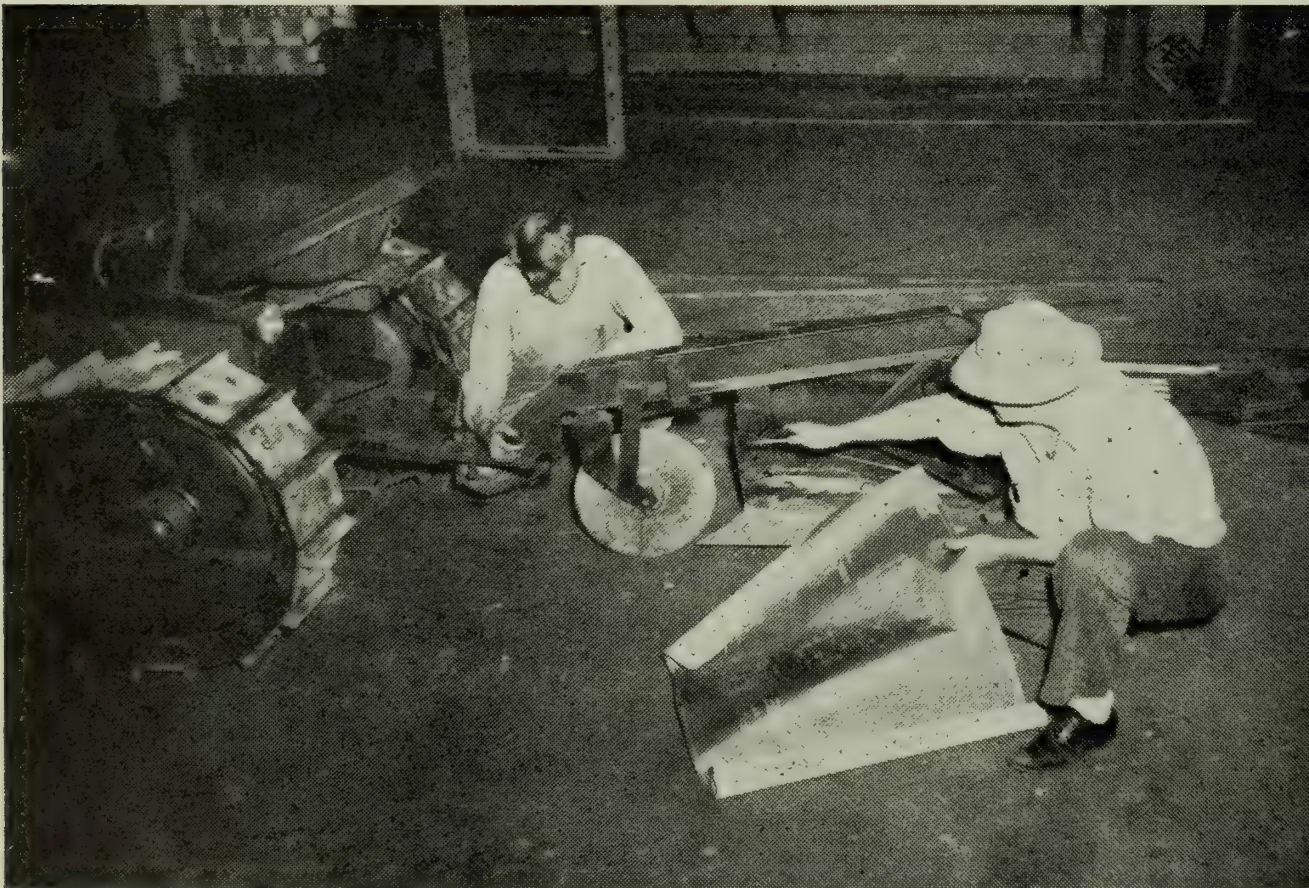


The  $\frac{3}{4}$  ton jeep truck.





Mechanics of the Sumter Shops put the finishing touches on several light crawler-type tractors before they are released to fight fire.



This excellent firebreak plow was designed and built at the Commission's Sumter Shops.



Among the accomplishments of the central repair shops are the designing and manufacture of ten plows for 1/4 ton Jeep and Ford Ferguson suppression units; designing and manufacture of a plow for a 3/4 ton Jeep suppression unit; installation of 16 plows with lifts on suppression units; designing and manufacture of 120 backfire torches; training of equipment operators over the entire state in thorough tractor and plow care and maintenance; and the equipping of all ranger pickup trucks with power pumps, booster tanks, backpack pump racks and other fire fighting accessories.

The two traveling automotive mechanics made a total of 320 field inspections of equipment, and at the time of inspection made 400 first division repairs in the field.

The heavy suppression equipment mechanic made 32 service trips to the field, and made mechanical repairs at the central shop including 12 heavy repair jobs to tractors, three partial overhauls, rebuilt two tractor engines complete, repainted two trailers, tractors and plows, manufactured and attached four plow stands for Mathis plows and made 14 truck inspections. In addition, this heavy equipment mechanic assisted in the construction of four galvanized steel tower cabs and assisted in seven training programs.

Much good work has been done by the mechanical staff in driver training and preventive maintenance on trucks.

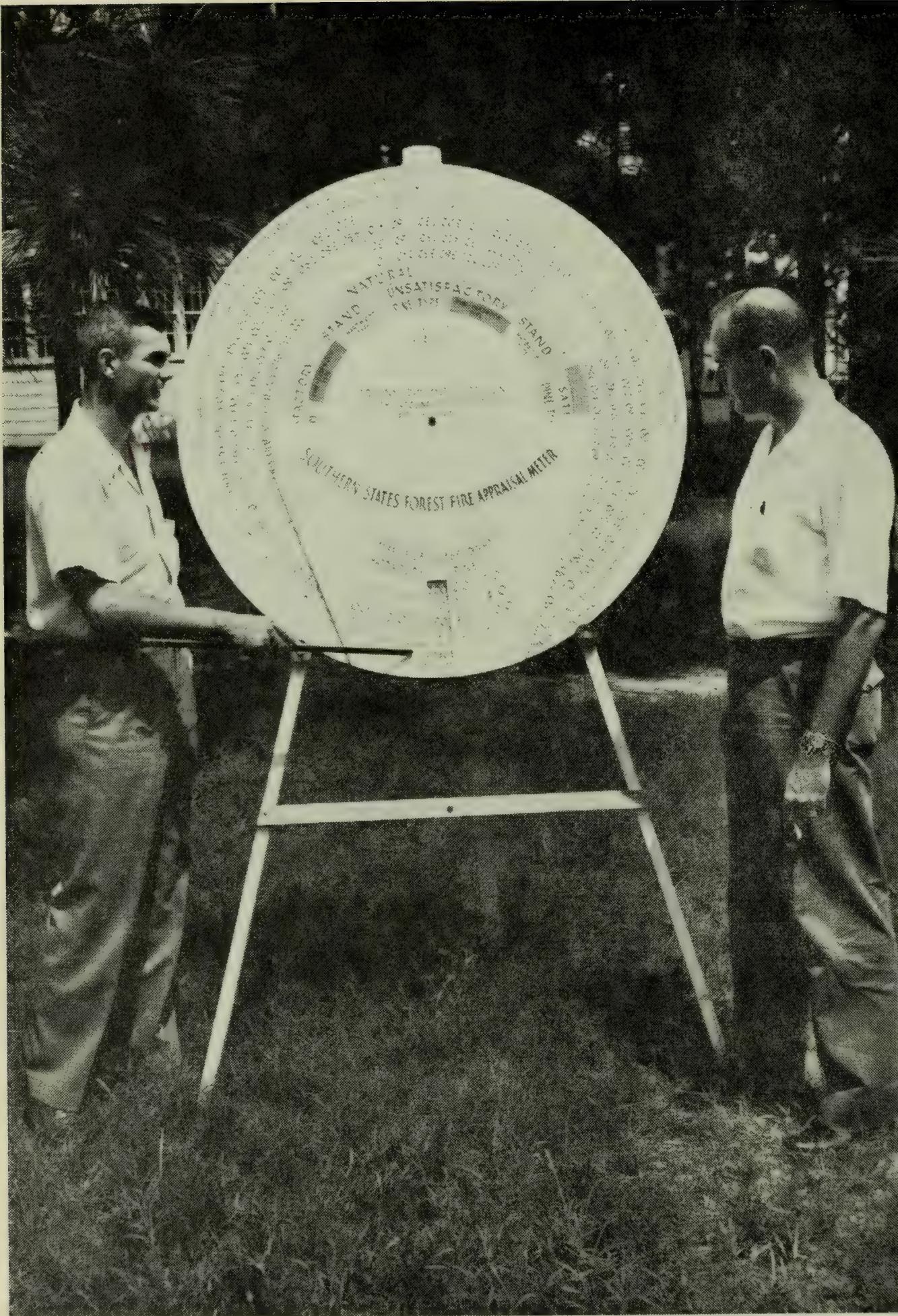
During the year, 150 repair jobs were made at the Sumter Shops at a cost of \$3,337.25. The cost of this work, if done commercially, would have been \$6,711.47, thus effecting a savings to the state of \$3,374.22.

### **Experimental Work:**

Considerable work has been done by the mechanical staff at the Sumter Repair Shops in the development of new specialized equipment for use by the fire control organization, thus aiding immeasurably to the efficiency of the fire protection work in the state.

Among the equipment designed, constructed or modified by our fire control mechanics are an alidade, a plow for the 1/4 ton Jeep, a plow for the 3/4 ton Jeep, a backfire torch, truck side rails, truck booster tanks, tower cabinets, concrete forms, plow and hydraulic lift system for the light crawler tractor, tank





One valuable piece of equipment designed by personnel of the Forestry Commission was the fire damage appraisal meter, a large training model of which is shown here. All other southern states and the U. S. Forest Service have adopted this damage meter.



cleaning machine, fire location map, azimuth circle and a damage appraisal meter.

It is interesting to note that of this equipment designed, constructed or modified by the S. C. Commission of Forestry, the azimuth circle silk-screened on an aluminum base is now being used by state departments of forestry in twenty states, the alidade is being used by twelve other state departments of forestry, the damage appraisal meter by all of the ten other Southern States and the U. S. Forest Service Region Eight, and the fire location map by several adjacent states.

Shop drawings, photographs and descriptions of all equipment developed by the State Commission of Forestry are made available on request to all forestry and allied agencies.

### **Warehousing:**

The Sumter Warehouse was operated to some extent for the storage of fire control and other equipment prior to shipment to the field. This project was administered jointly with the other branches.

### **Map Project:**

Again this year, several copies of fire location and occurrence maps, both for towers and personnel use, were printed on the photocopy process at the Sumter Map Shop. Considerably fewer maps had to be made, however, during the year for replacements, thereby indicating that the experimental protective coating placed on maps in the field is rendering them far more durable.

In connection with this map project, the Branch of Fire Control designed and constructed fire location map protector cases. Protector cases were prepared for each of the 134 lookout towers and were installed by the district rangers as a means of protecting fire location maps from the weather. These protector cases have resulted in greatly increasing the life of fire location maps, thereby reducing the cost to the state for this necessary fire control accessory.



## FOREST FIRE SUMMARY

Fire records prepared by Commission of Forestry field personnel during the year indicate that South Carolina experienced a fairly normal fire season as relates to weather conditions and fire occurrence. Generous rainfall during most of the months of the fire season created unfavorable burning conditions; however, two extended hazardous fire periods occurred during January and again during March. These hazardous periods were characterized by a complete lack of precipitation, resulting in an excessively low fuel moisture, and high winds. It was also during these periods that fire occurrence was abnormally high.

Despite favorable burning conditions during these two months, each of the county unit organizations performed well in stopping the spread of those fires which occurred. Through the efforts of the suppression forces, many thousands of acres of forest lands were saved from destruction or damage by wild fires.

### Illegal Fires:

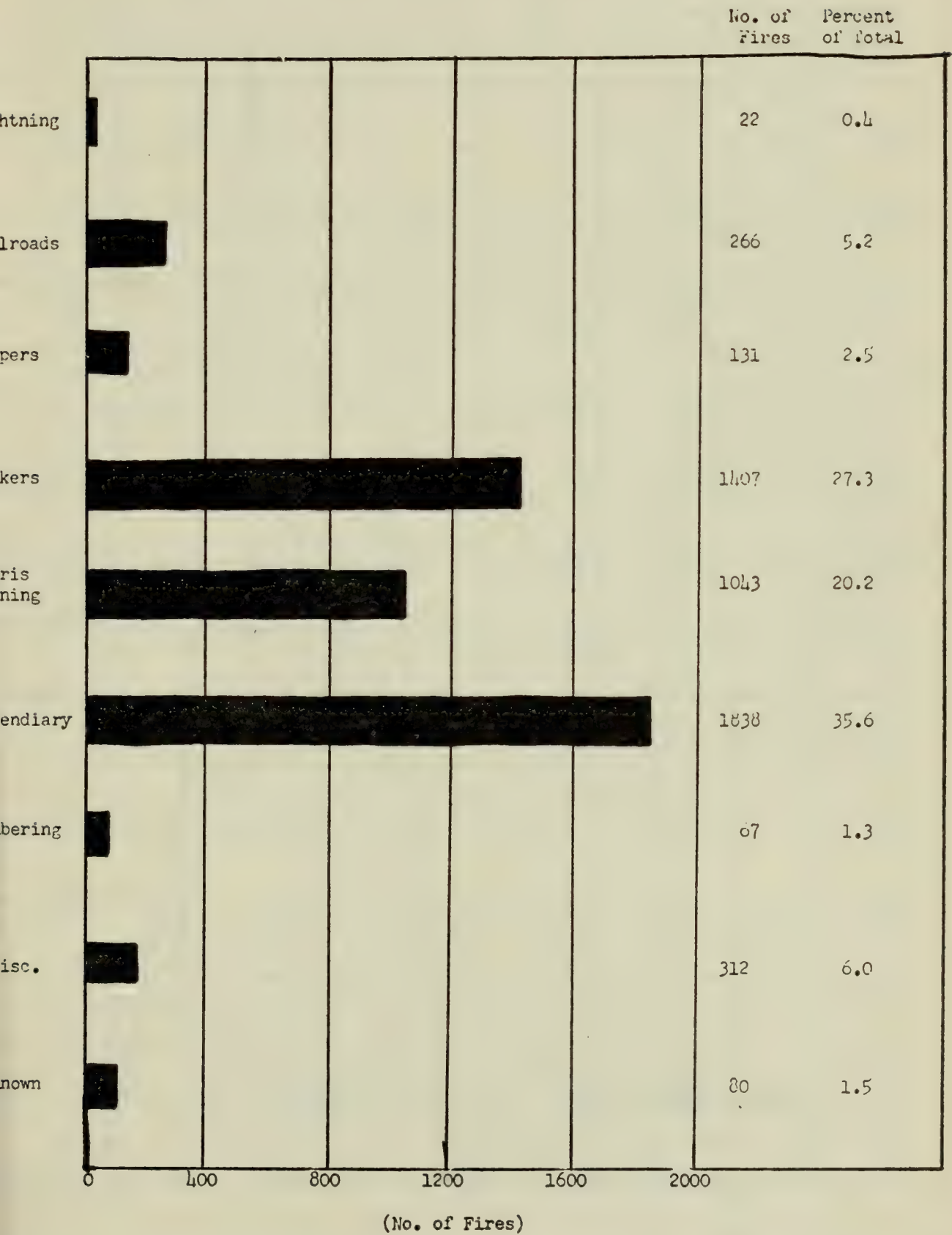
During the entire year a total of 11,300,008 acres of forest land were protected from fire by Commission of Forestry personnel aided by landowners and other persons in the state. A total of 5,166 illegal forest fires occurred during the year. These fires burned 91,668.2 acres, or 0.78% of the total forest area of the state. The average area burned per fire was 17.7 acres.

The month of March proved to be the worst fire month of the fiscal year when 1,739 forest fires burned 35,160.4 acres. This was 33.7% of all the fires and 20.2% of all the acres burned during the entire year. During the other hazardous month, January, 1,110 illegal fires burned 18,625.8 acres.

Orangeburg County experienced the highest fire occurrence with 568 fires which burned over 9,254.7 acres, or 2.83% of the total forest area of the county. Horry County suffered the greatest acreage burned with 11,499.7 acres, 2.03% of the total woodland area of the county, included in 271 forest fires. Edgefield, Newberry and Saluda counties each had 31 forest fires, the smallest number of fires occurring in any of the counties of the state. Anderson, Cherokee and Newberry counties suffered the smallest losses in acreage burned of any of the counties in the state with 223.8 acres, 217.2 acres and 221.6 acres burned, respectively. Pickens County had the smallest percent of the

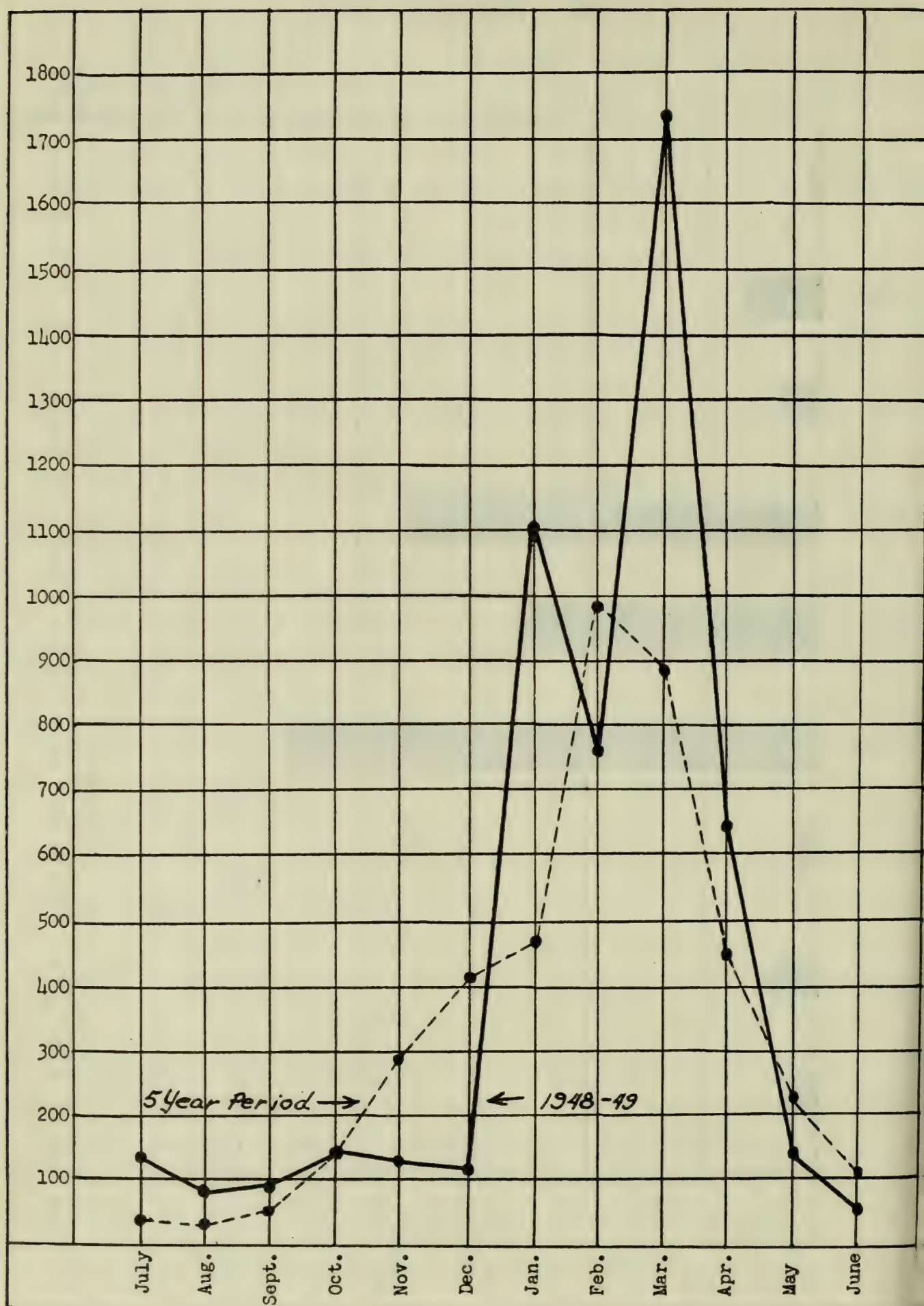


CAUSES OF FOREST FIRES IN SOUTH CAROLINA  
July 1, 1948—June 30, 1949





COMPARISON OF AVERAGE NUMBER OF FIRES BY MONTHS  
FOR THE FISCAL PERIOD 1943-48 AND FISCAL  
YEAR 1948-49



Average area under protection fiscal period 1944-49 -- 10,135,528 acres  
Area under protection fiscal year 1948-49 -- 11,789,643 acres



total forest area burned of any of the counties of the state with 0.12%. Cherokee, Chester, Kershaw, Newberry and Saluda counties each had less than one-quarter of one percent of the total forest area in the county burned. Anderson County had the smallest average area burned per fire with 3.6 acres. Fifteen additional counties averaged less than ten acres per fire.

### **Causes of Fires:**

As in previous years, the greatest causes of forest fires are attributed to incendiarism, smoking and debris burning. A total of 4,288 fires, or 83.1% of the total occurring during the year were attributed to these causes. The fires attributed to these causes burned 74,265 acres, or 81.0% of the total acreage burned during the year by all causes.

Of these causes, the greatest number of fires, 1,838, was attributed to incendiarists. Incendiarism alone caused 35.6% of all of the fires occurring in the state. Likewise, the largest area burned in the state for any cause was attributed to incendiarism. The 1,838 incendiary fires burned 41,844.4 acres, or 45.6% of the total forest area burned by all causes. A total of 1,407 fires was attributed to smokers, burning 16,984.8 acres, and 1,043 fires resulting from careless debris burning, burning over 16,435.8 acres.

Fire prevention efforts are, of course, directed toward the elimination of all fires. Since 83% of all of the fires occurring in the state are attributed to incendiarists, debris burners and smokers, the bulk of our fire prevention efforts must be directed toward these sources.

### **Legal Fires:**

Large areas of forest land were intentionally burned during the year by landowners or their authorized agents. These burnings were conducted for various reasons. A total of 453 fires, burning 25,273 acres were attributed to landowners' desire to reduce forest fire hazard. For the production of game birds and improvement of shooting conditions, 145,945 acres were burned by some 178 fires. 671 fires, burning 8,578 acres were conducted to rid timber areas and/or potential forest land of accumulated debris and rubbish. Woodland pasture burning for early grass production and other grazing purposes totaled 643 fires covering an area of 19,817 acres. 227 miscellaneous fires for various





Careless burning of tobacco beds causes many destructive woods fires.



Willful burning was the greatest cause of forest fires least year. Careless smokers caused almost as many woods fires as willful burners.



reasons such as boll weevil eradication, destruction of snakes, ticks, insects, etc., burned 3,278 acres. For all purposes, a total of 2,172 legal fires were set, burning a total of 202,891 acres of forest land. This represents 1.7% of the total woodland area under protection in South Carolina, more than twice the area burned by all illegal fires occurring in the state during the year.

In accordance with the State Fire Control Act of 1945, landowners are not restricted from burning over their timber areas provided the fires are confined to their property boundaries and are not allowed to spread onto the lands of others. Nevertheless, many fires legally set, but not reported to the unit organization, are allowed to escape to lands of others due to lack of precautionary measures to prevent their spread. In addition to the considerable amount of time and effort exerted by personnel of the unit organizations in suppressing these escaped fires, the rangers and wardens lost much valuable time investigating numerous legal fires which were reported by lookout towermen. In the majority of these cases, their services were urgently needed elsewhere on going illegal fires.

It is hoped that either through better landowner cooperation in reporting their intent to burn prior to the actual ignition or a burning permit law for all counties, the hazardous results of the legal fire problem in South Carolina may be improved considerably.





South Carolina forests are growing at the rate of 100 board feet per acre per year. With proper management, complete fire control and reforestation where needed, they could grow 300 board feet per acre per year.



## FOREST MANAGEMENT

The demand for and production of all forest products in South Carolina continues at a very high level. These demands for practically all classes of forest products will probably continue for at least the next four or five years. Since our saw-timber growing stock has decreased during the past ten years, South Carolina must take the necessary action to build up saw-timber growing stock and to make all forest land more productive.

### PRODUCTION BY YEARS

Year	Lumber	Pulpwood
1942	1,079,351 M Bd. Ft.	946,000 Cords
1943	984,773 M Bd. Ft.	985,000 Cords
1944	850,748 M Bd. Ft.	1,053,500 Cords
1945	723,667 M Bd. Ft.	877,500 Cords
1946	1,005,700 M Bd. Ft.	995,700 Cords
1947	871,014 M Bd. Ft.	948,388 Cords
1948	798,700 M Bd. Ft. (Est.)	1,108,523 Cords
1949	1,002,000 M Bd. Ft. (Est.)	1,050,500 Cords (Est.)

Since South Carolina woodlands are only one-third to one-half productive and since many wood-using industries are interested in locating in sections where timber supply and other needs are available, it is possible for South Carolina to greatly step up the importance of the forest lands of the State for the economic and social betterment of the people of the State by taking those steps necessary to make all forest land more productive.

Forest management activities of the State Commission of Forestry are conducted to improve the forestry situation and to better all of the people of the State are explained in detail on the following pages.

### MANAGEMENT ASSISTANCE

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing technically trained foresters to assist landowners in managing their timber lands.

Any landowner in the State can receive this service. A forester, with the landowner or his agent, will look over the woodland,





Timber land owners in South Carolina can get trained foresters of the Commission to help them with their woodland problems.



give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection and reforestation measures needed.

In cases where cutting of timber is recommended, a representative of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a sample timber sale agreement. The only charge for this service is \$ .35 per thousand board feet or \$ .13 per cord for timber actually marked and tallied. All other services are provided free of charge.

During the year 706 woodland examinations were made on 126,600 acres of forest land, and a total of 22,009,336 board feet and 4,429.0 cords were selectively marked for 235 landowners on 13,768 acres of forest land.

DISTRICT SUMMARY OF WOODLAND EXAMINATIONS AND MARKING ACTIVITIES—1948-1949

DISTRICT	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp-
Aiken .....	106	19,727	54	2,328	4,282,065	539.5
Camden .....	89	14,326	35	3,477	1,677,695	1,757.0
Florence .....	110	10,401	27	680	1,843,675	177.7
Kingstree .....	74	34,066	28	2,441	4,905,834	53.0
Newberry .....	116	16,821	32	2,327	4,668,486	696.0
Spartanburg .....	157	16,453	39	1,938	3,488,633	290.0
Walterboro .....	54	14,806	20	577	1,142,948	915.8
TOTALS.....	706	126,600	235	13,768	22,009,336	4,429.0



## SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp-wood
1941-42 .....	213	37,500	84	14,792	8,271,202	.....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429.0
TOTALS.....	2,789	808,289	1,096	112,571	145,496,820	15,444.3

## REFORESTATION

A total of 31,805,775 seedlings were distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly .....	13,840,350
Slash .....	17,187,350
Longleaf .....	362,975
Lowland Spruce Pine .....	409,100
Arizona Cypress .....	6,000
Total .....	31,805,775

Of this total 30,338,775 seedlings were distributed in South Carolina to 2,717 planters. Requests by large planters had to be reduced and in spite of this, a large number of small orders were unfilled.

The General Assembly again made it possible for any land-owner in the State to receive up to 5,000 seedlings free of charge at the nursery or at 50c per thousand delivered to the nearest express office. See Tables 12 and 13 in the Appendix for a record of seedling distribution by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years:





After a thorough examination of a landowner's woods and if cutting is recommended, trained foresters of the Commission will mark the timber for selective cutting when the landowner requests it. The best trees are always left to grow into high valued products such as poles and saw-timber.

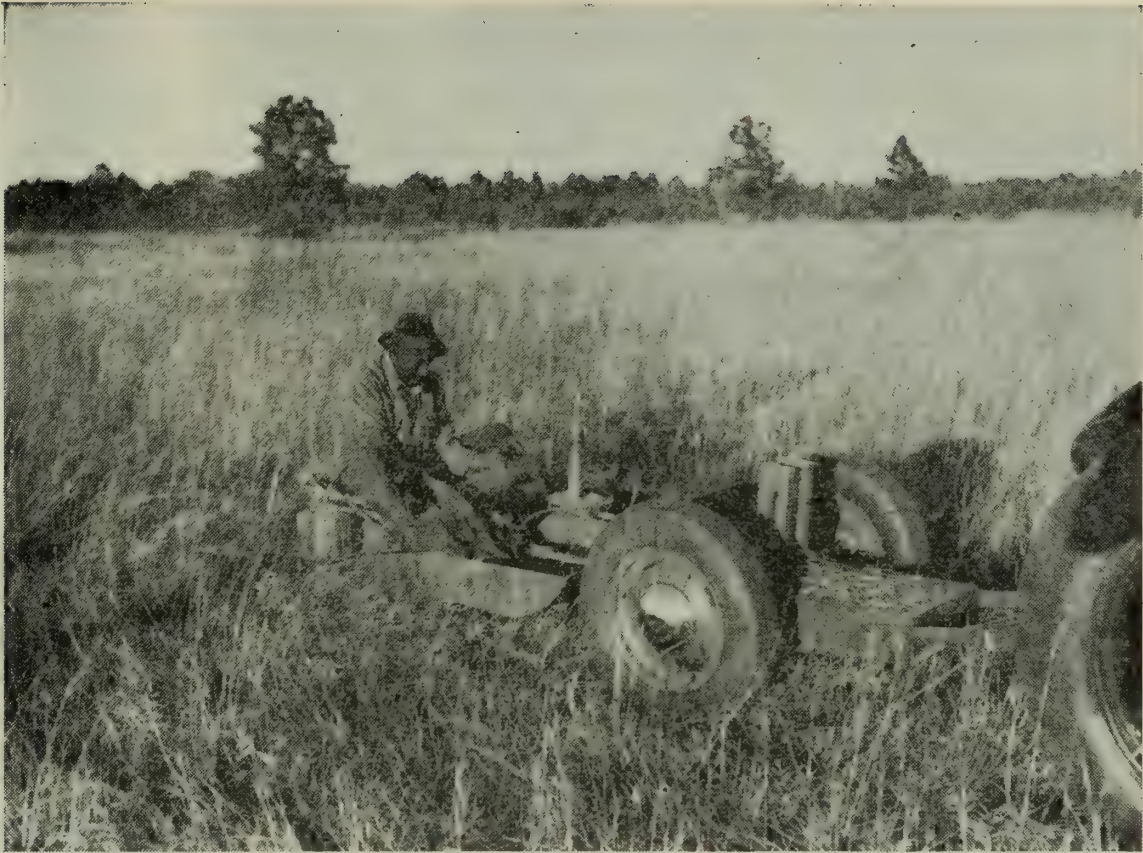




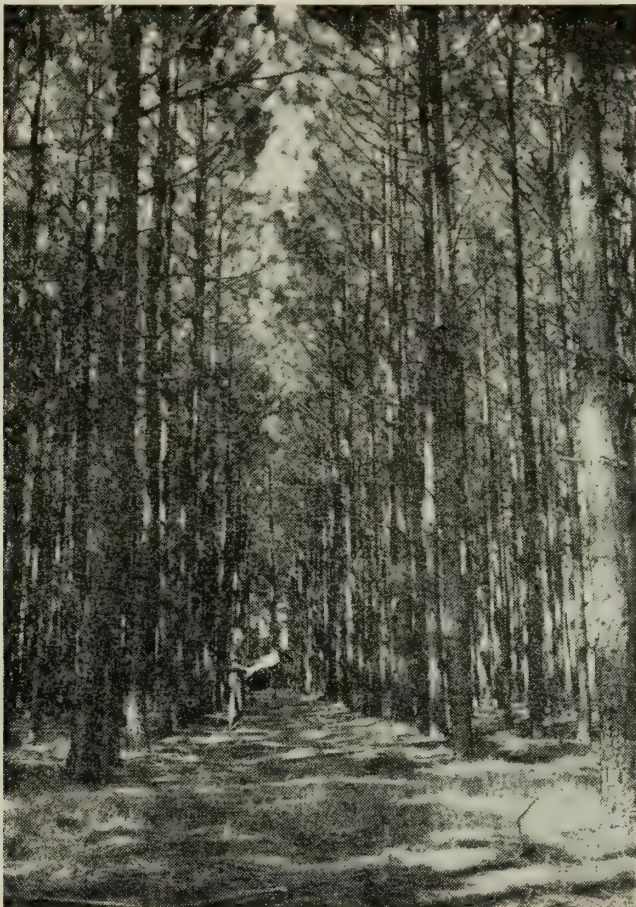
Year	Seedlings Planted
1928-29	142,000
1929-30	148,000
1930-31	986,000
1931-32	976,000
1932-33	996,000
1933-34	1,031,000
1934-35	7,529,000
1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600
1947-48	11,356,990
1948-49	30,338,775
Total	184,930,538

The Wedgefield nursery has continued to be the ideal forest tree nursery. Current inventories indicate that 32 million seedlings will again be available for distribution during the winter of 1949-50. Permanent improvements constructed during the year included the expansion of the water system both underground and overhead. This expansion necessitated the purchasing of a new 100 H. P. Diesel motor and increasing the capacity of the water pump. This expanded water system will increase the production capacity of the nursery by 16 acres.





One of several types of mechanical tree planters. These machines are operated by some consulting foresters, some Soil Conservation Districts and some counties. They will do contract planting for private landowners. Under good conditions these machines can plant from 10 to 14 thousand seedlings a day.



These trees, planted about 16 years ago, are almost ready for thinning.



## CONE COLLECTION

The cone crop for the Fall of 1948 was poor as compared with the 1946 bumper crop. The district foresters were able, however, to secure a portion of cones needed. The number of bushels of cones collected by species and by districts is shown in the following table:

DISTRICT	Slash	Longleaf	Loblolly	Spruce	Fruit Poplar	Fruit Cedar	Totals
Aiken .....	425.0	.....	26.0	.....	.....	.....	451.0
Camden .....	.....	.....	686.5	.....	.....	.....	686.5
Florence .....	.....	.....	532.0	.....	.....	.....	532.0
Kingstree .....	.....	.....	794.0	104.0	.....	.....	898.0
Newberry .....	.....	.....	1,223.25	.....	.....	.....	1,223.25
Spartanburg .....	.....	.....	.....	.....	711 #	39 #	.....
Walterboro .....	960.5	.....	25.0	.....	.....	.....	985.5
Sand Hills Forest.....	.....	73.0	.....	.....	.....	.....	73.0
U. S. Forest Service.....	.....	.....	126.0	.....	.....	.....	126.0
TOTALS.....	1,385.5	73.0	3,412.75	104.0	711 #	39 #	4,975.25

From these cones listed in the above table, 3,574 pounds of seed were extracted as shown in the following table:

Species	Pounds	Lbs. per bushel
Slash .....	801	.57
Loblolly .....	2,075	.60
Longleaf .....	26	.37
Lowland Spruce Pine .....	33	.31
Poplar .....	600	
Cedar .....	39	
	3,574	

In addition 4,000 pounds of slash pine seed and 60 pounds of Arizona cypress seed were purchased on the open market.

At the end of this year there were only 2,021 pounds of slash, 1,120 pounds of loblolly, and 299 pounds of longleaf pine seed in storage for use during the next year.





Each year several thousand bushels of pine cones are collected from all over the state. They are taken to the drying barns near Sumter and the seed is extracted. Later, after cleaning, dewinging and other operations, the seed is planted at the Commission's Wedge-field Nursery.

### FOREST SURVEY

The South Carolina State Commission of Forestry cooperated with the U. S. Forest Service through the Southeastern Forest Experiment Station in completing a re-survey of the forest resources of the state. A comparison of the forest resources in 1947 to that of 1936 shows that we have cut 3 billion board feet more than we have grown in the past 11 years.

The survey shows that more and more trees are cut for market before they are ready. These smaller trees necessarily make the grades of lumber lower. The timber now standing runs to a higher percentage of cull trees than in 1936.

The forest area of the state during the 11 year period was increased by nearly 1 1/4 million acres. This brings the total forest acreage in the state up to approximately 12 million acres.

The survey also shows how protection of forest from fire has resulted in an increase of 15% in young pine timber below saw



log size during the past 11 years. Young hardwoods have increased 17% during the same period.

There are 1.6 million acres that should be planted to trees. This represents the idle, non-productive land in the state.

To maintain our production and use of forest products at present levels will require more complete fire protection, a stepped up planting program, better cutting practices and education of our people.

## FARM FORESTRY

A summary of the farm forester's accomplishments is included with the data for the Aiken District. In addition to woodland examinations and reports, the farm forester marked 1,351,085 board feet of sawtimber and 470.5 cords of pulpwood for 37 landowners.

## COUNTY AND STATE FORESTS

No additional state forest land was acquired during the year, but the total acreage dropped from 138,574 acres to 130,691 acres. This decrease in acreage was caused by redemption of 2,550 acres of Aiken County Forest Land by former owners.

Work on management plans started during 1946-47 was completed on Poinsett State Forest and about 3/4 completed on Sand Hills State Forest.

Prior to acquisition, almost all of the land included in state forests was heavily cut over, burned, and generally misused. For that reason it will take a number of years to rebuild these areas to a productive condition.

The state forests are listed below:

1. Aiken County Forest .....	6,388 acres
2. Cassatt State Forest .....	462 acres
3. Harbison State Forest .....	2,202 acres
4. Phelps State Forest .....	809 acres
5. Poinsett State Forest .....	28,830 acres
6. Sand Hills State Forest .....	92,000 acres
<hr/>	
Total .....	130,691 acres

A detailed report of activities on each of the Forests follows:



## **AIKEN COUNTY FOREST**

During the year the acreage in Aiken County Forest dropped from 8,398 acres to 6,388 acres. This loss in acreage is caused by former owners, heirs, or others of interest redeeming approximately 2,550 acres during the year. Act No. 748 of 1946 provides that a former owner, heir, or others of interest may redeem forfeited lands within ten years after forfeiting by paying taxes, penalties, cost of betterments and expenses of Aiken County Forest, less any amount of revenue received by Aiken County Forest.

To date boundary surveys have been completed on 67 tracts aggregating approximately 12,590 acres. Concrete monuments have been erected at all property corners. All property lines have been thoroughly brushed out and marked with orange paint. Plats of all surveyed tracts have been prepared and filed for record in the office of the Clerk of Court of Aiken County together with deeds and leases.

The Edisto District of the U. S. Soil Conservation Service has surveyed and prepared soil maps of 45 tracts of Aiken County Forest. They have also made recommendations as to the best use of these lands.

This year 27.6 miles of firebreaks were plowed on 7 tracts, involving approximately 602.8 acres. The Aiken Unit Fire Control Organization handled fire suppression on the Forest. 36 fires burned 2,304.5 acres of Aiken County Forest Land during the year. The figures are included in the Fire Control Section of this report under Aiken County.

During the year 55 acres were planted to pines. This brings the total area planted to date up to 1,923 acres on 55 different tracts of the Forest.

Only 4 free use permits were issued. Free use permits allow individuals to cut fuelwood for domestic use, gather pine straw, cut fence posts and other similar use. 6 special use permits covering rental of 58 acres of farmland were issued.

## **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres, which is composed largely of scrub oak and open fields. Twelve acres were planted to slash pine seedlings during the year. No fires occurred on the area.



### **HARBISON STATE FOREST**

Harbison State Forest, comprising 2,202 acres, is located in Richland County. No cutting was done on the area during the year.

The management plan for this area indicates no cut for the present, the idea being to build up growing stock on the area, and then after a few years start an annual cutting program with the cut limited to timber that is in need of cutting for thinning or improvement.

The Richland Unit Fire Control Organization, is responsible for fire protection and is assisted by the caretaker. No fires burned on the area during the year.

### **PHELPS STATE FOREST**

Phelps State Forest is made up of 809 acres of Sand Hills land located in Barnwell County. It was donated to the S. C. State Commission of Forestry by Miss Claudia Lee Phelps of Aiken, S. C. At the close of the fiscal year the S. C. State Commission of Forestry was in the process of reconveying this property to Miss Phelps.

No cutting was done on this area during the year. Most of the area is covered with scrub oak, although there is considerable merchantable timber in spots. This timber is growing well and is not in need of being cut at the present time.

The Barnwell Unit Fire Control Organization handles fire protection and is assisted by the caretaker. No fires burned on the area during the year. 15.1 miles of firebreaks were plowed during the year.

### **POINSETT STATE FOREST**

The 28,838 acres of land making up Poinsett State Forest is located south of Wedgefield in Sumter County. This land is leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government.

This area is in need of a tremendous amount of tree planting and other good forestry practices aimed at building up the productivity of the land.



## Management Plan:

The management plan completed during the 1947-48 fiscal year was used as a guide in planning the work necessary to improve the timber producing capacity of this area. It is estimated that some 10 years will be required to plant the open and now productive land on this forest.

## Tree Planting:

A total of 605,000 pine seedlings were planted on the Forest during the season. Species planted are as follows:

Slash Pine .....	450,000
Loblolly Pine .....	150,000
Spruce Pine .....	5,000

Slash and loblolly pine were planted with the Lowther tree planter and the longleaf pine was planted by hand.

## Forest Products Harvested:

Products processed include the following:

Lumber (Bd. Ft.) .....	175,808
Pulpwood (Cords) .....	53.5
Fuelwood (Cords) .....	31
Posts .....	920
Sawtimber (Bd. Ft.) .....	318,015

Of the 52,707 board feet of sawtimber cut on the Forest and manufactured into lumber, 20,000 board feet was sold largely to the other branches of the Commission of Forestry. The remaining volume is being held to supply the needs of the Commission during the next year. All of the trees cut were selectively marked before cutting.

The 53.5 cords of pulpwood was sold as stumpage to a local pulpwood producer, and most of this was salvaged from tops left after logging operations. The Forest benefits additionally because the removal of this material decreases the fire hazard.

The 31 cords of fuelwood were sold locally and for the most part consisted of slabs and edgings from the sawmill.

Approximately 318,015 board feet of sawtimber stumpage was sold to the highest bidder. This timber was selectively marked before cutting.



**Fire Protection:**

6 fires burned 71.6 acres during the year. The Forest organization is assisted in controlling woods fires by the Sumter Unit Fire Control Organization. Data on number of fires and area burned is included in the Fire Control Section of this Report with the Sumter County figures.

Approximately 165 miles of boundary and interior firebreaks were maintained on the Forest.

**Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. These camps were used for a total of 6,140 camper days. A detailed report on these two camps will be included in the Parks Division Section of this report.

**Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement by the Sumter County Board of Commissioners. The Board of County Commissioners works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to control the area, and handles the stocking of lakes with young fish where needed.

**Agricultural:**

36 tenants rented 1,487 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the Forest and others assist where needed in the preventing and suppressing of forest fires.

**Roads and Truck Trails:**

15 miles of roads were machined and holes filled in where necessary, eleven bridges and 14 culverts on these roads were replaced or repaired.

**Telephone Lines:**

The 25 miles of telephone lines in the Forest system was brushed out during the year. General maintenance was carried on as needed to keep the telephone system in good working order.



### **Silvicultural Practices:**

About 60 acres of planted longleaf and slash pine were released by cutting the overtopping scrub oak. Approximately 10 acres of longleaf pine were pruned. Poison was used to kill scrub oak and other undesirable hardwoods on 4 acres of underplanted slash pine. The poison used was Ammonium Sulfamate (Ammate).

### **Maintenance and Repair:**

General repairs were made on the Director's residence during the year. These repairs consisted of replacing the wooden front steps with concrete and brick, stopping leaks in the roof, replacing rotten boards on the back porch and painting floor surface on both back and front porch.

Repairs to the barn at forest headquarters consisted of removing the old shingles from the two shed roofs and replacing with Juniper shingles.

Two chicken houses were thoroughly cleaned and all rotten boards replaced.

A chicken house and small garage were constructed at the foreman's residence. This residence was wired for electricity and plumbing installed.

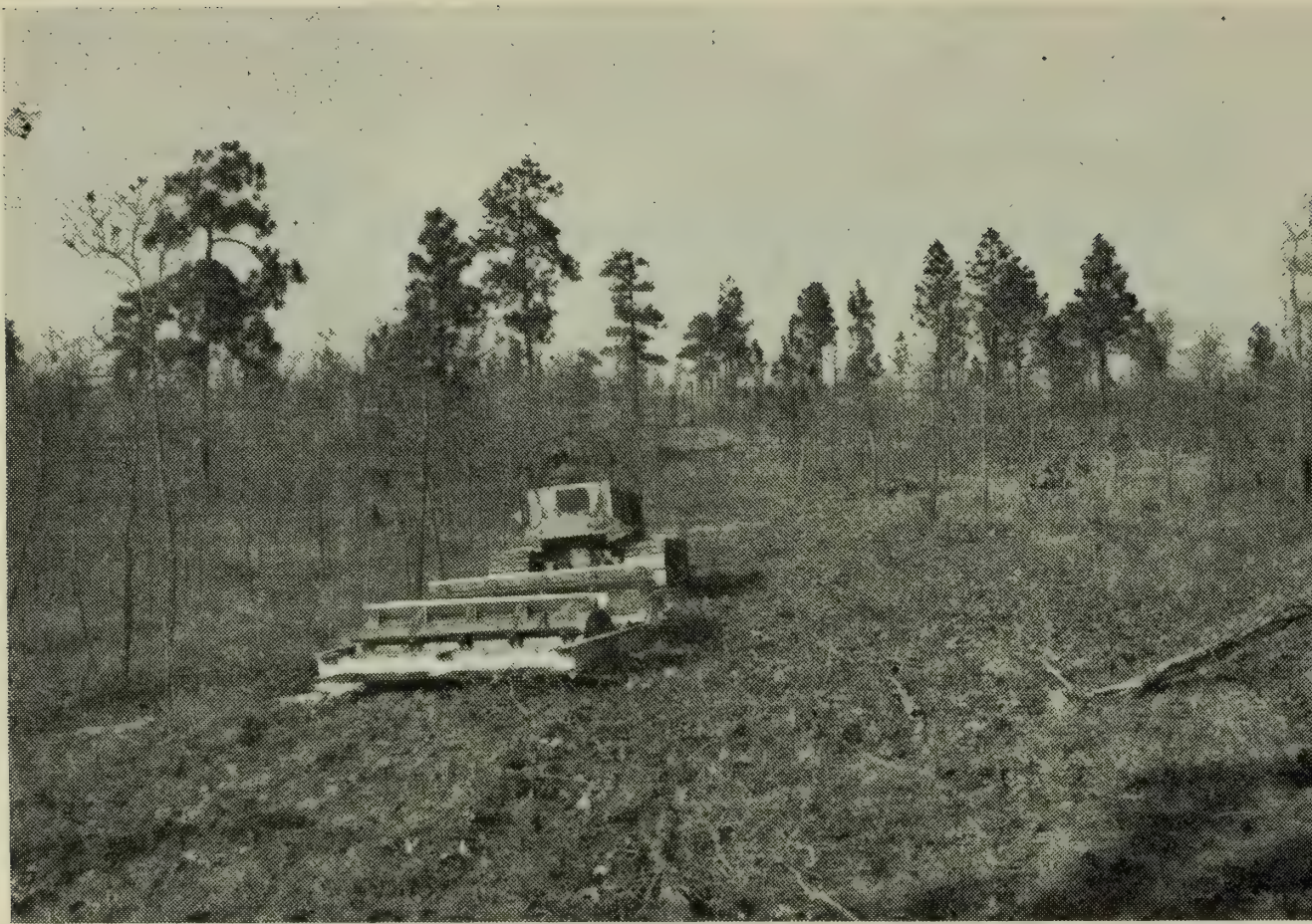
The old "Melrose House" roof was repaired replacing the old wood shingles with modern colonial type asbestos shingles. The "Melrose House" was the residence of Matthew Singleton, a colonel on General Frances (Swamp Fox) Marion's staff during the Revolutionary War.

Eleven tenant houses were repaired during the year.

## **SAND HILLS STATE FOREST**

Sand Hills State Forest located in the scrub oak-longleaf pine type in Chesterfield and Darlington counties consists of 92,000 acres. One-half of the area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management on this portion of the Forest as well as being responsible for all activities and management of the other one-half of the Forest. This area is leased from the Federal Government on a 95-year lease agreement.





There are 795,000 acres of scrub oak land in South Carolina. Scrub oak is of little value; the land produces little. Pine seedlings will not grow if planted among the scrub oak. Clearing the land with a brush cutter is an experiment that may prove to be the answer to the problem.



After brush cutting and disking operations the land is ready to be planted to pine. If the brush cutting experiment is successful, valuable pine timber may take the place of the low valued scrub oak.



Before the area was acquired by the Government, it was heavily cut over, badly burned, and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand.

### **Tree Planting:**

During the year 418,850 pine seedlings were planted with a Lowther tree planter and by hand. Species breakdown is as follows:

Longleaf .....	5,150
Slash .....	413,700

### **Forest Products Harvested:**

The following forest products were selectively marked and sold from the forest during the year:

Sawtimber (Bd. Ft.) .....	212,515
Pulpwood (Cords) .....	280.6

### **Fire Protection:**

During the year 35 fires burned 894.2 acres. Fire protection is handled by the Chesterfield Unit Fire Control Organization assisted by the forest personnel.

A total of 133.5 miles of firebreaks were plowed on the forest with a Ford-Ferguson tractor equipped with a Love gang disc plow. These breaks were from 8 ft. to 16 ft. wide, and were plowed with light equipment.

### **Recreation:**

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area, and latrines provided. The 15 Boy Scout Troops located in Chesterfield county use this area and facilities for over-night



camping. The District Scout Camporees are also held here. The lake is open to fishing and bathing but no swimming is allowed.

Campbell's Pond, colored recreational area, has been reactivated and improved by the Parks division of the State Commission of Forestry, and has been redesignated Campbell's Pond Negro State Park. This area has been further developed and received very heavy use during the year. A more detailed report will be found in the Parks Section of this report.

### **Fish and Wildlife:**

No hunting was allowed on the area during the year, but plans call for the establishment of areas for game preserves on which no hunting will be permitted. It is planned that the majority of the area in the future, however, will be open to public hunting.

Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the State game and fish laws.

### **Agricultural Lands:**

29 tenants rent and farm 1,552.4 acres of agricultural land on the forest. Practically all of the lands, which were formerly cultivated and which are too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

### **Roads and Truck Trails:**

During the year 55.0 miles of truck trails were graded, brushed out, and washes filled in. Eighteen wooden culverts were cleaned out and stringers and decking repaired. Five timber bridges were repaired by replacing rotten deckings and rails. 37 diversion ditches were cleaned out. Two miles of truck trails were treated with clay topsoil.

### **Telephone Lines:**

Maintenance of all telephone lines is being handled by the Chesterfield Unit Fire Control Organization, but during the year forest personnel assisted the County forces in repairing interruptions of service on the line.



### Silvicultural Practices:

In addition to tree planting, release cuttings, prunings and the eradication of undesirable hardwoods (scrub oak) was accomplished by the Forest personnel. Two methods of eradicating scrub oak were used. First, the scrub oak was treated with a weed killer (Ammate-ammonium sulfamate and 2,4-D). This treatment was applied on a small scale in order that the effectiveness of the poison be tested without incurring considerable cost.

Two methods of applying the "Ammate" were used: (1) The "Ammate" crystals were placed in a cup cut in the stem of the tree, (2) the second method was by spraying the foliage with a solution of "Ammate" and water. This latter method has been used on several experimental plots on the Forest. On these plots the larger scrub oak were removed and the sprouts were treated with the "Ammate" spray. The solution was applied at varying strengths; from 2 lbs. of crystals per gallon of water down to 1/3 lb. of crystals per gallon of water. Shortly after the solution was applied, the portion of the scrub oak plants above the ground was killed regardless of the strength of the solution used. However, the amount of sprouting varies proportionately with the strength of the solution used. The amount of sprouting on the area where the full strength solution was used is negligible at the present time.

The second method used in eradicating scrub oak was through the use of a Marden Brush Cutter pulled by a 40 H. P. crawler type tractor. After the scrub oak are cut down with the brush cutter the entire area is plowed with a large Athens Fire Plow. This plowing is followed with a second plowing using a small set of discs to aid in pulverizing and leveling the land. After this operation has been completed, this area can be planted to slash pine seedlings through using a mechanical tree planter. To date 320.5 acres of scrub oak land has been cleared through use of the brush cutter.

After several years of unsatisfactory planting of longleaf, slash and loblolly pine in the scrub oak trees on the Forest it was concluded that the reason for the unsatisfactory survival was a result of the keen competition for food and water. It is believed from experiments which have been conducted recently that satisfactory survival can be obtained on this scrub oak land



through the planting of slash pine if the scrub oak competition is eliminated. This one fact has been proven on an area which was planted to slash pine in 1944. On this area the scrub oak had been cut back several times in an effort to help the growth of the pine. In August 1948 the scrub oak on this area was treated with "Ammate" solution. Since that time the majority of the pines have made a remarkable growth during the one year period. A great many of the trees have doubled their height and in all cases there was at least two feet of new growth.

### **Maintenance and Repair:**

The Sugar Loaf Mountain recreational area was maintained during the year by the Forest personnel. The entrance road from the Scotch Road to the mountain was brushed out and all washes filled. The bridge at the lake was repaired and all buildings, fireplaces, tables and benches maintained.

Considerable work was done to the buildings at the Forest headquarters. Rotten weatherboards and window casings were replaced on all buildings and each building was given two coats of white lead and oil paint.

A grease rack was constructed inside the truck garage to facilitate maintenance and greasing of automotive equipment.

Maintenance work was also done on four tenant houses and all Forest signs were repaired and painted.



## PUBLIC RELATIONS

Existing personnel and facilities are not sufficient to comply with all requests for the educational services of the Commission for which this branch is responsible.

Good progress has been made on all programs and services of the State Commission of Forestry, but the job is by no means complete. Too many forest fires still burn too much timber—drain on forest resources has been exceptionally heavy during and following the war—1½ million acres of idle land must be planted to trees. Because of these reasons, our timberland produces only about 100 board feet per acre per year. With the growing conditions that we do have it is possible to grow 300 board feet per acre per year.

So that we may correct these conditions and grow as much high grade timber as possible, we must take forestry information and problems to the people. The public relations branch of the Commission of Forestry is charged with this responsibility.

Many educational activities are carried on by the Commission to do this job.

### COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The Cooperative Forest Fire Prevention Campaign is a major educational activity of the Commission of Forestry. Colored posters, bookmarks, blotters, stamps, buttons and other materials carrying forest fire protection messages are prepared as a public service by the Advertising Council, Inc., and distributed through the U. S. Forest Service to all of the states. This material is then placed before the people of the state by the U. S. Forest Service, the Clemson College Extension Service, the American Red Cross and the State Commission of Forestry. These agencies were given great support by schools, churches, civic organizations, newspapers, radio stations and others.

Through this campaign, "Smokey", the fighting bear, became known to millions of people and his messages of "Another 30 Million Acres Will Burn This Year—Unless YOU are Careful" and "Remember—Only YOU Can Prevent Forest Fires" have helped make South Carolinians forest fire conscious.

The following table shows the distribution of these materials:



ANOTHER 30 MILLION ACRES  
WILL BURN THIS YEAR —  
*unless you are careful!*



*Remember - Only you can*  
**PREVENT WOODS FIRES!**

The slogans expressed by this poster are carried on bookmarks, blotters, lapel buttons, and other media for this year's Cooperative Forest Fire Prevention Campaign.



### Distribution of Fire Prevention Materials

Posters .....	42,471
Leaflets and pamphlets .....	8,040
Stickers and stamps .....	175,232
Bookmarks and blotters .....	238,592
Other prevention materials .....	22,190
<hr/>	
Total .....	486,525

### FORESTRY QUIZ CONTEST

In the future, the forests of South Carolina will be handled by the children of today. So that they may appreciate forest resources and learn something about their care, forestry quiz contests are held. Questions used in the contest relate to forest fire control, forest management, reforestation and state parks. During the past year 2,077 contests were held before an audience of 151,584 people.

In the individual school contests a good grade of mechanical pencil was given for first prize and second prize and four wooden pencils were given as consolation prizes. These pencils had forestry messages printed on them. In the county finals, small cash prizes were given.

### Quiz Contests

	Number of Contests	Total Attendance
Aiken District .....	232	23,071
Camden District .....	311	24,145
Florence District .....	312	25,873
Kingstree District .....	174	17,091
Newberry District .....	370	23,262
Spartanburg District .....	470	24,289
Walterboro District .....	208	13,853
<hr/>		<hr/>
Total .....	2,077	151,584





Forestry demonstrations are held so that teachers, students, landowners and interested citizens may be kept up to date on the latest cutting, planting and fire control practices.



## FORESTRY DEMONSTRATIONS

The Commission of Forestry, in its effort to carry the principles of good forestry to as many people as possible, held 182 forestry demonstrations over the state last year.

Many of these demonstrations were held for Vocational Agriculture teachers and Veteran teachers. These teachers then placed the information before their students. As in the past, planting demonstrations were held in every county in the state at the start of the planting season to insure that the 31 million seedlings produced by the Commission would be planted correctly. Each person ordering seedlings were invited to attend these demonstrations. In addition, other demonstrations dealing with forest fire protection, correct cutting methods and other forestry subjects were held.

### Forestry Demonstrations

	Number of Demonstrations	Total Attendance
Aiken District .....	18	526
Camden District .....	36	1,549
Florence District .....	27	739
Kingstree District .....	6	110
Newberry District .....	21	769
Spartanburg District .....	55	1,400
Walterboro District .....	19	880
Total .....	182	5,973

## CONSERVATION WEEK

Conservation has been defined as preservation by wise use. Each year one week is especially set aside to call to the attention of every citizen the need for using our resources wisely all through the year. Governor J. Strom Thurmond proclaimed the week of November 28 to December 4 as Conservation Week with Friday, December 3, as Arbor Day.

The Garden Club and the Federated Women's Club of South Carolina sponsored the observance of Conservation Week and Arbor Day with the Commission of Forestry. The Clemson College Extension Service, the Soil Conservation Service, the State



Department of Education, newspapers, radio and other groups cooperated in placing the problem of conservation before the people of South Carolina.

Fifty thousand copies of the "Conservation Week" issue of "Forestry and Park Notes" were distributed over the state. Suggested programs for Conservation Week and Arbor Day programs, along with a booklet containing poems, prose and songs concerning forest resources, were also distributed to schools, churches, civic and patriotic organizations and other interested groups to help them develop their programs.

Personnel of the Forestry Commission and the other groups gave numerous talks at meetings held during the week.

The Clemson College Extension Service and the State Commission of Forestry arranged for the planting of many forest tree seedlings on Arbor Day.

A summary of Conservation Week activities follow:

#### Conservation Week Activities

	Number of Groups Participating	Number of Individ- uals attending
Aiken District .....	149	15,463
Camden District .....	176	9,500
Florence District .....	133	5,367
Kingstree District .....	174	17,091
Newberry District .....	231	8,569
Spartanburg District .....	343	20,405
Walterboro District .....	122	7,085
Total .....	1,328	83,480

#### TOWERSITE BEAUTIFICATION CONTEST

The Towersite Beautification is an annual contest held by the State Commission of Forestry for the benefit of the 134 lookout towers scattered over the state. The objective of this contest is to encourage a complete live-at-home program and to improve and develop the small areas of state owned land on which they live. The contest has stimulated great interest among the tower-men. Because of the need for locating towers on high points many of the areas are poor and unattractive, but hard work on



the part of the towermen and their families is improving the soil and beautifying the grounds from year to year. All during the year towermen and their families do such things as plant flowers, grass and shrubs, grow and can vegetables and fruit, raise livestock and poultry, keep the towers and other buildings clean and in good shape as well as keep a sharp lookout for woods fires.

Modest prizes are given to those towermen who do the most during the year to develop their live-at-home program.

This year the following winners were selected:

Archie Crosby, Towerman at Green Pond Tower in Colleton County, was judged first prize winner; Laurin T. Sessions, Towerman at Tyson Tower in Georgetown County, won second prize; followed by Mrs. Thelma Garvin, Towerlady at Adams Run Tower in Charleston County, third place; and J. A. Sherbert, Sr., Towerman at Hobbysville Tower in Spartanburg County, fourth prize. Each of these towermen also won first or second district prize in the contest for the forestry district in which the towers are located.

Other district prize winners were: Mrs. Doris K. Taylor, Towerlady at Gilbert Tower, Lexington County, first Aiken District prize; O. L. Chaplin, Towerman at Orangeburg Tower, Orangeburg County, second Aiken District prize; G. P. Kolb, Towerman at Black River Tower, Sumter County, first Camden District prize; K. O. McCaskill, Towerman at State Park Tower, Richland County, second Camden District prize; E. B. Wilson, Towerman at Philadelphia Tower, Darlington County, first Florence District prize; Mrs. Minnie L. Simmons, Towerlady at Marion-Gresham Tower, Marion County, second Florence District prize; Mrs. W. W. Watts, Towerlady at Sampit Tower, Georgetown County, second Kingstree District prize; Mrs. R. C. Zimmerman, Towerlady at Epworth Tower, Greenwood County, first Newberry District prize; Mrs. Adell Adams, Towerlady at Saluda Tower, Saluda County, second Newberry District prize; and Mrs. E. L. Burgess, Towerlady at Cleveland Tower, Greenville County, second Spartanburg District prize.

### MOTION PICTURES

Motion pictures are an excellent way to get forestry information to the people. Movies were used by personnel of the Forestry Commission as an aid in instruction. The Commission operated



two motion picture units during the year. Both were staffed by technical foresters. In addition, district office personnel held numerous showings.

Films on forest fire control, forest management, reforestation and other forestry subjects were shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups and others.

This educational activity needs strengthening with a better library of interesting and educational forestry movies. When such films are made available a much better motion picture program can be carried on by the Commission.

The number of showing and attendance by districts is shown below:

#### Motion Picture Showings 1948-49

	Number of Showings	Total Attendance
Aiken District .....	119	11,068
Camden District .....	176	12,859
Florence District .....	136	9,586
Kingstree District .....	106	11,343
Newberry District .....	105	7,035
Spartanburg District .....	129	11,146
Walterboro District .....	108	10,150
	<hr/>	<hr/>
Total .....	879	73,187

#### VOCATIONAL AGRICULTURE SCHOOL FORESTS

The Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry cooperated in carrying on the work on school forests which have been in operation for many years.

During the year personnel of the Commission of Forestry and Professor F. E. Kirkley of the Agricultural Education Department of Clemson College held numerous forestry training schools throughout the state for all Vocational Agriculture teachers and Veteran teachers. Fire protection, planting, correct cutting methods and estimating timber were the subjects taught at the schools. The teachers then carried the information back to their students.



School forests are excellent aids for the teacher in teaching forestry to his students. The teacher with the help of foresters from the district forester's office give the students the basic principles of forestry in the classroom and on the forest. Boys actually plow firebreaks, figure out which trees to cut, measure and cut them, set up thinned and unthinned plots and compare growth, and plant old fields. This practical experience does not stop with work on the school forest. Many students have home forestry projects. They apply the knowledge learned on the school forest and take it home and use it to improve their own woodland.

Many schools do not have school forests, but other forestry work was carried on by them. All Vocational Agriculture classes had some forestry project. It is significant to note that students planted over 8 million pine seedlings, showing what a fine job the teachers did in interesting the boys in forestry.

Each year modest prizes are given the schools and teachers who have the best school forests and home projects.

Jonesville High School in Union County, won first prize for having the best school forest in the upper-state division. Edmunds High School of Sumter and Camden High School tied for first place in the lower-state division. The division is based on forest types.

Edgefield High School and Saluda High School tied for second prize in the upper-state division. Ridgeland High School won the second place prize in the lower-state area.

Blackstock High School and Cleveland High School tied for third place in the upper-state division. Walterboro High School won third prize in the lower-state area.

The objective of the Commission is to have at least one school forest in every county in the state. They are invaluable as demonstration areas and teaching aids and they stimulate much interest among the people of the community in which they are located.

Schools completing a major portion of this school forest work are as follows:

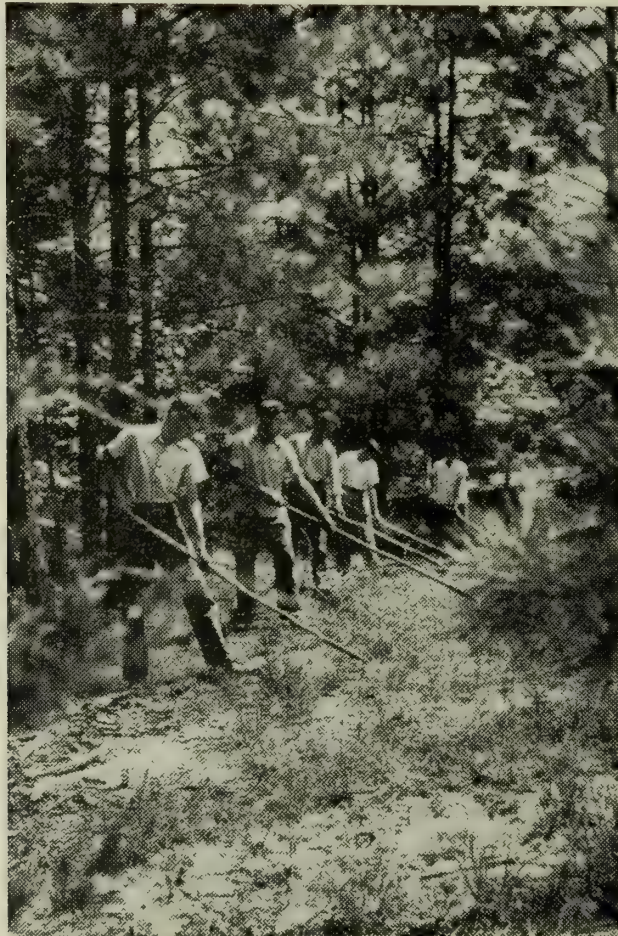
Aiken District: Monetta, Langley-Bath-Clearwater, and Ehrhardt.

Camden District: McBee, Camden, Ashwood, Sherwood, and Edmunds.





**This group of vocational agriculture students, Future Farmers of America, made fire fighting rakes from scrap metal as one of their forestry projects.**

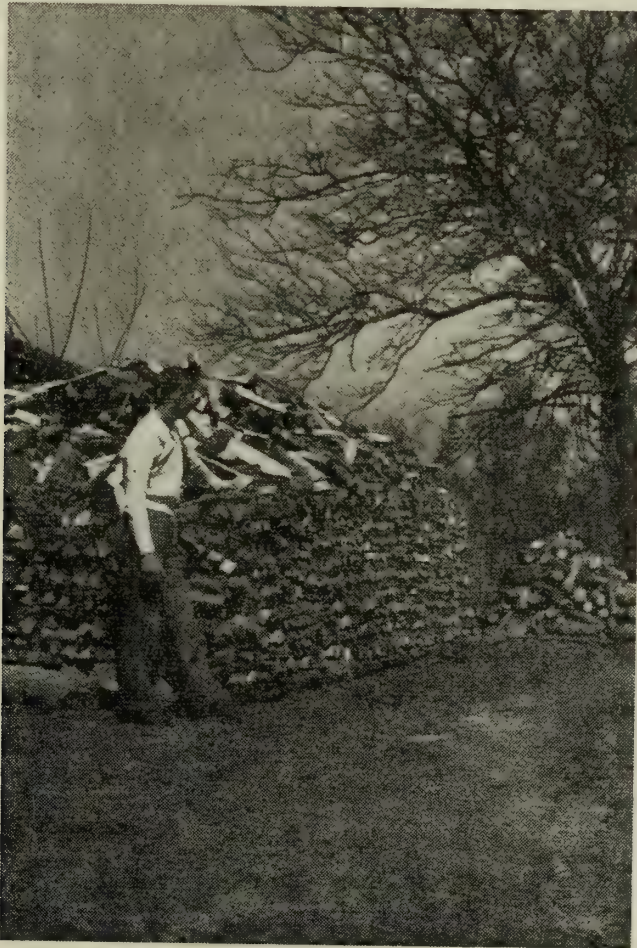


**Future farmers learn how to use their fire fighting rakes by raking a firebreak. During the school year 1948-49, Future Farmers of America and veteran students constructed more than 2,000 miles of firebreaks.**





FFA students are taught thinning and other principles of good forestry on their school forests. During the school year students carried out selective cutting on more than 31,000 acres of forest land.



All of this fuel wood came from thinnings from this young student's home forestry project. Lessons are learned on the school forest and are carried to the home.



Florence District: Dillon, Fletcher Memorial, Lakeview, Lamar, Latta, and Conway.

Kingstree District: Berkeley, Cross, Andrews, and Manning.

Newberry District: Blackstock, Edgefield, John de la Howe, Saluda and Chester.

Spartanburg District: Pendleton, Cleveland, Dacusville, Jonesville, and Rock Hill.

Walterboro District: Walterboro, Harleyville, Brunson, and Ridgeland.

## RESOURCE USE EDUCATION

Teachers and administrators in all types of educational institutions have shown an increasing interest in teaching natural resources. For the second year, the State Department of Education and the S. C. Resource Use Education Committee requested that the State Commission of Forestry send a representative to the Southern States Work Conference at Daytona Beach, Florida, to study how this type of teaching might be best developed. This year the study was completed and the work will be published during the coming year.

The S. C. State Commission of Forestry has pioneered in this field with the cooperation of the State Department of Education. School forests for Future Farmers of America, teaching materials for various grades, movies, and field classes for teachers and students have long been a function of the public relations branch of the Commission.

State parks offer excellent facilities for teaching conservation and resource use in out-of-door classrooms ideally suited for this purpose.

All activities that will teach the wise use of our forest resources should be greatly expanded.

## TALKS

Talks to various groups and organizations continue to be a good way to place forest conservation and the work of the Commission of Forestry before the people of the state.

Numerous requests for talks on all phases of forestry and park work going on in the state were welcome by all the personnel of the Commission. Garden Clubs, church and school groups, civic and patriotic organizations were among those requesting talks.





More than ever before teachers are becoming interested in Conservation and Resource Use Education. Here a group of elementary grade teachers study forest conservation on a school forest operated by high school Future Farmers of America.

During the year a total of 2,265 talks were made by the Columbia office, district and county personnel before 127,077 people. The following table shows the division by districts and Columbia office:

Talks		
	Number of Talks	Total Attendance
Aiken District .....	331	36,616
Camden District .....	705	32,400
Florence District .....	204	8,881
Kingstree District .....	222	20,049
Newberry District .....	224	7,373
Spartanburg District .....	170	6,805
Walterboro District .....	334	7,873
Columbia Office .....	75	7,480
<hr/>		
Total .....	2,265	127,477



## RADIO

More and more radio is being used as an aid in getting forestry information to the people. Several districts have regular radio programs and all districts have used radio to a great extent.

Radio stations in and adjacent to the state have been very cooperative in presenting forestry information over the air. During time of critical forest fire danger, they have cooperated by constantly warning of the danger and asking all the people of the state to be careful with fire and matches. County and district office personnel have used platters, prepared scripts, informal talks and discussions in getting forestry information on the air.

## EXHIBITS

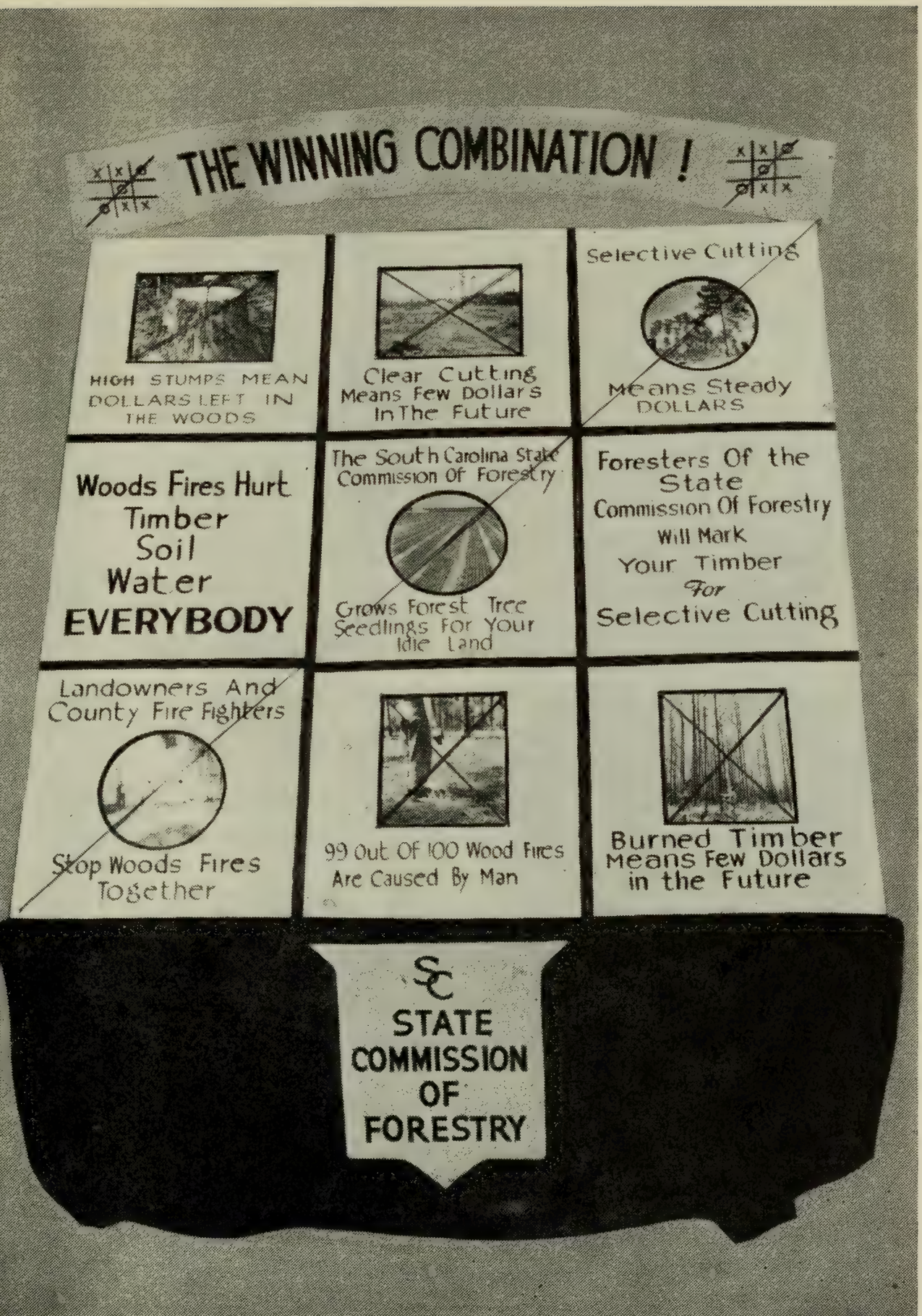
During the year the Commission placed exhibits in twenty-three county fairs held in the state and in the State Fair. In addition, an exhibit was placed in Asheville, North Carolina for the Carolina Lumber and Building Supply Association meeting and one was placed in Columbia during the Garden Club Flower Show held last April. At the request of South Carolina delegates to the annual meeting of the National Education Association a forest educational display was exhibited at NEA Headquarters, Cleveland, Ohio, July 1948.

The exhibits used in county fairs showed, by large pictures and written messages, good forestry practices and explained the forestry services offered by the Commission of Forestry.

The exhibit placed at the State Fair entitled "Follow the Dollar" attracted much attention and told the story of how each person in a community benefitted from our forestry resources.

State and county fairs present a fine opportunity for the dissemination of forestry and park information through exhibits, personal contacts with the public by personnel on duty and the distribution of literature.





Exhibits such as this were placed in 29 fairs and conventions during the year.



## RECORD OF EXHIBITS

Location of Exhibit	Type of Exhibit	Estimated Attendance
Camden.....	Photo Mural—Fire Control.....	9,000
Lancaster.....	Photo Mural—Fire Control.....	7,000
Lancaster (Colored).....	Photo Mural—Fire Control.....	8,000
Bishopville.....	Photo Mural—Fire Control.....	7,000
Sumter.....	"Follow the Dollar".....	10,000
Sumter (Colored).....	"Follow the Dollar".....	7,000
Florence.....	Photo Mural—Timber Marking.....	12,000
Loris.....	Photo Mural—Pulpwood Cutting.....	8,000
Marion.....	Photo Mural—Pulpwood Cutting.....	15,000
Kingstree.....	Photo Mural—Timber Marking.....	3,200
Moncks Corner.....	Photo Mural—Timber Marking.....	3,000
Manning.....	Photo Mural—Timber Marking.....	5,000
Chester.....	Photo Mural—Timber Management.....	12,000
Greenwood.....	Photo Mural—Timber Management.....	10,000
McCormick.....	Fire Protection and Timber Management Display	2,500
Newberry.....	Photo Mural—Timber Management.....	10,000
Anderson.....	Photo Mural—Timber Management.....	80,000
Pickens.....	Photo Mural—Timber Management.....	10,000
Union.....	Photo Mural—Timber Marking Project.....	15,000
York.....	Photo Mural—Timber Marking Project.....	33,000
Charleston.....	Photo Mural—Firebreaks.....	75,000
Walterboro.....	Publications Display.....	10,000
Cottageville School.....	Vocational Agriculture Program.....	200
Asheville, N. C.....	Picture Panel Display.....	8,000
Columbia.....	History of Fire Protection in S. C.....	10,000
State Fair.....	"Follow the Dollar".....	95,000
State Fair (Colored).....	"Follow the Dollar".....	25,000
Columbia (Social Workers Conference)...	Photo Mural—Fuelwood Thinning.....	4,000
Cleveland, Ohio.....	Educational Materials.....	4,000
TOTAL.....		497,900

## SOUTHERN STATES PUBLIC RELATIONS CONFERENCE

Assistant State Foresters in charge of public relations in state forestry agencies in thirteen southern states met in February 1949 in Hot Springs, Arkansas.

Significant progress was made toward cooperative projects which would reduce the unit cost of certain educational materials for the individual states.

At this meeting a child's story book on forest conservation was prepared for approval by State Departments of Education throughout the south. After approval was given, the forestry agencies succeeded in having the U. S. Government Printing Office in Washington print the booklet. It will be available to schools in 1949-50.

## TRAINING

Public relations training played an important role in the State Training Meeting of technical personnel and unit rangers, previously referred to in the fire control section of this report. It is recognized that every employee of the Commission is a public relations man every day of the year and that he must be trained to use public relations as a tool just as he must be trained to



use a new piece of equipment so that he can more efficiently fight fires. Because it is far more productive to prevent fires than it is to fight them, it is important that all of the personnel of the Commission be prepared to do the best possible public relations job so that the number of fires in the state may be reduced.

Public relations instruction regarding timber management and reforestation was given to the technical personnel of the Commission.

Armed with these public relations tools both technical and county personnel returned to their respective jobs better prepared to do the job.

Follow-up training periods for unit personnel extended this training to all fire control forces in each county.

### **PUBLICATIONS AND POSTERS**

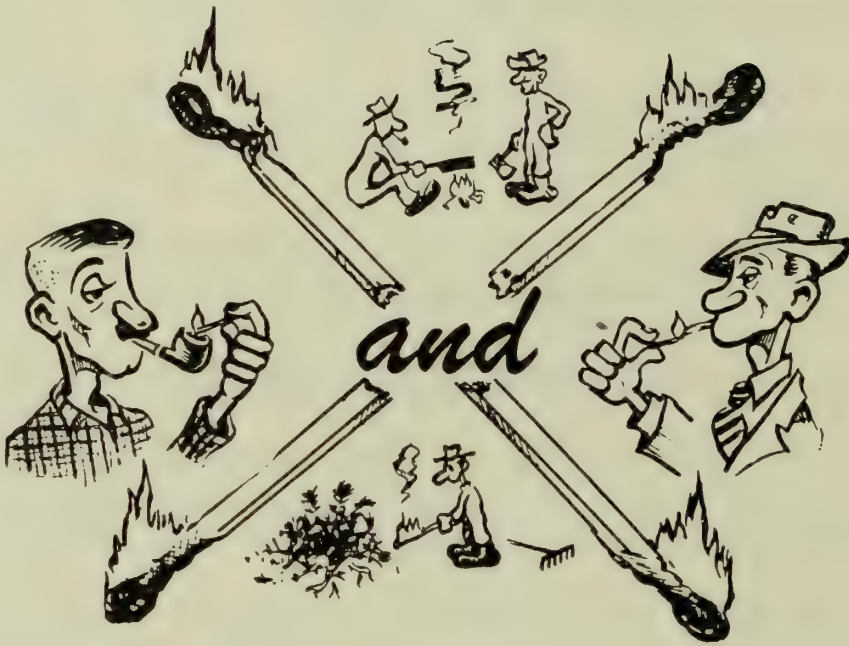
Another way of carrying forestry and park information and messages to the people of the state is through leaflets, folders, booklets and posters.

Many requests for informational literature is received by the Commission each year. These requests are complied with by mail. A great amount of literature is distributed personally by Columbia, district and county personnel.

Each year the Forestry Commission and the several public and private organizations doing forestry work in the state prepares and has printed several publications on such subjects as fire protection, forest management, reforestation and state parks. This past year two forest management leaflets were printed. They were "Marketing Your Timber Crop" and "Thinning for Pulpwood". One fire prevention leaflet entitled "99 Out of 100" was published. This was a three color leaflet and attracted considerable attention and comment from other forestry organizations all over the country. A planting leaflet showing the correct method of planting seedlings was prepared and printed. A four color folder on state parks entitled "South Carolina State Parks Welcome You" was published. This folder has also attracted considerable comment. Fifty thousand copies of "Forestry and Park Notes" were distributed over the state. The very popular "Junior Forestry Notebook" was not reprinted due to its high cost, and the supply was almost exhausted during the year. In



*be sure your*  
**MATCH**



EVERYTHING YOU LIGHT  
 WITH IT IS

**DEAD OUT**

This drawing, in three colors, was used in the fire prevention leaflet "99 Out of 100". In an effort to make material more understandable, many drawings and pictures are used in Commission of Forestry publications.

its place a new story book was prepared jointly with thirteen southern states to reduce cost.

Twelve thousand posters with the simple but effective message, "STOP WOODS FIRES" were printed. They may now be seen on many roads of the state.

The State School Book Commission cooperated again with the Forestry Commission in the preparation and distribution of 750,000 textbook covers, carrying forestry and state park messages for the use of South Carolina school children.



### Distribution of Literature

Posters .....	8,000
Bulletins and leaflets .....	61,602
Book covers .....	750,000
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Total .....	819,602

### NEWS RELEASES AND ARTICLES

News releases and articles are of great value. The Commission of Forestry is fortunate in that personnel in every county in the state write news articles for publication. In this way, news is localized. It makes better reading for the people and is more acceptable to the editors than general articles.

In order to keep the public informed of forestry and park news, many news releases are prepared each year. Numerous feature articles are prepared on request and in many cases photographs are furnished by the Commission.

During the year district and county personnel prepared 834 news articles. An additional 64 releases were prepared by the Columbia office. Many of these articles as well as special features were sent to and published in out-of-state papers, lumber and forestry journals and other periodicals.

In addition to prepared releases, much information was given orally to press representatives and they prepared it for publication.

News ads and prepared mats were used in many newspapers throughout the state in connection with the Cooperative Forest Fire Prevention Campaign.

Press cooperation continues to be excellent. This has greatly helped to place forestry and park news and information before the people.

### SIGN AND WOODWORKING SHOP

Personnel of the Sign and Woodworking Shop produced some 457 routed letter signs, built numerous chairs and picnic tables for the various parks, did cabinet and carpentry work and gave valuable assistance in the production of state and county fair exhibits.



One important phase of the work of the Sign Shop is the production of routed letter signs. These are attractive signs with cream letters against a background of burnt umber. All of the Commission's installations and the school forests are marked with these signs. The uniformity of the signs enables the public to identify the park, state forest, lookout tower or other installation with the South Carolina State Commission of Forestry. These signs tend to give the installations greater educational value and make them easier to use.

### **SOUTH CAROLINA TREE FARM SYSTEM**

The South Carolina Tree Farm System was set up to recognize and certify the many landowners in the state who are practicing good forestry. To become a Tree Farmer, a landowner must prevent woods fires and take all reasonable precautions against them, he must apply sound cutting practices to existing timber and he must plant areas that will not reseed naturally.

The Tree Farm movement is sponsored in South Carolina by the State Commission of Forestry and the Clemson College Extension Service.

Before a landowner can be certified as a Tree Farmer, his application must pass the County Tree Farm Committee. The Committee is made up of the District Forester, the County Agent and one member of the County Forestry Board, or a representative appointed by the board. After clearing this committee the application goes to the State Committee which takes final action. The State Committee is made up of prominent citizens of the state interested in the advancement of forestry. They are: James H. Graham, Charleston; C. P. Key, Lodge; Oswald Lightsey, Miley; Dr. D. W. Watkins, Clemson; S. B. Huff, Piedmont; and C. H. Flory, Columbia. Assistant State Forester John C. Witherspoon is Secretary to the State Committee.

Landowners who have qualified under the S. C. Tree Farm System and who have been awarded certificates this year are as follows: Koppers Company, Inc. of Berkeley County; E. B. Hare of Oconee County; Koppers Company, Inc. of Orangeburg County; Dixie Clay Company of Aiken County; Southern Railway (Lincoln Green Forest) of Dorchester County; John Tatum of Orangeburg County; J. F. Meares of Dillon County; H. N. Cousar of Dillon County; Landon Thomas of Aiken County; J.



R. Hawkins of Richland County; Mrs. Alice Dominick of Jasper County; Mrs. S. B. McMaster of Richland County; Mr. and Mrs. E. M. Harris of Marlboro County; S. J. Chandler of Dillon County; J. B. Heins of Richland County; and J. Lamar Brantley, Manager Good Hope Corporation, of Jasper County.

The acreage represented by these certifications totals 43,763 acres.

### CONSERVATION SCHOOL

The Conservation of Natural Resources School for club women was held at Poinsett State Park June 21, 22 and 23. The school is conducted annually by the State Commission of Forestry to offer training to the women of the state interested in the conservation of natural resources.

Many interesting instructors gave classes on such subjects as the use of native plant material for home decoration, nursery production, conservation by forest fire protection, potential timber values to South Carolina through conservation and wise



This group attending the Conservation School for Women, find out about growing forest tree seedlings from Nurseryman Larry Staley of the Commission's Wedgefield Nursery.



use, the educational value of recreation in state parks to develop a "conservation minded public" and the use of the pulpwood market to make profitable the thinning of young timber to produce poles, piling, sawlogs and other higher valued products.

Those attending were: Mrs. W. Holt Dye, President of the Garden Club of South Carolina, and Mrs. C. H. Flory of Columbia; Mrs. Norman Lynch, President of the Federated Women's Clubs, Inc. of South Carolina, of McColl, S. C., and Mrs. Jack Bryant, Mrs. Walter E. Clark, Miss Emily Culler, Mrs. Archie Schiffley, Mrs. Aubrey Clark and Mrs. Dibble Moss, all of Orangeburg.



## STATE PARKS

South Carolina's State Parks continue to play host to a million and a half visitors annually, who seek relaxation and recreation in the peaceful, beautiful, and natural surroundings of these areas.

In the sixteen years that have elapsed since the idea of State Parks for South Carolina first crystallized with the establishment of Cheraw State Park, there has been a steady, upward trend in State Park usage. The enjoyment of healthful outdoor adventure apparently is a movement which will not be suppressed.

Following the success of the first park came other areas, until now, South Carolina is served by nineteen full fledged State Parks—and all of them wanted.

With perhaps two more areas, one in the Eastern Pee Dee section, and the other in the making at the Clark Hill project, the normal expansion of State Park development will have been served. Any acquisitions of areas for white parks beyond these, should be considered most carefully, at the same time realizing our great need for more facilities and areas for Negro parks.

In late summer of last year the "polio" ban caused a sharp decline in park attendance and in certain sections along the North Carolina border all park activities saw a complete shut-down. The day visitor totals dropped, vacation cabin assignments were cancelled and group camps suspended operations. This emergency is reflected in our attendance totals, also in our anticipated receipts. June 1949, however, saw a peak attendance at all parks, foretelling of a highly successful new summer season.

Outstanding in the year's events was the opening of the two new parks—Croft State Park immediately south of Spartanburg, and Santee State Park on Lake Marion in Orangeburg County.

Picnicking, which attracts one-third of all park visitors, was given further encouragement when new picnic and barbecue shelters were completed at Chester, Greenwood, Hunting Island, Paris Mountain, Santee, Sesqui-Centennial and Table Rock State Parks. These are large structures 24 x 60 feet in size, and some with fireplaces and cooking ovens added.

Swimming was had for the first time at Croft and Rivers Bridge State Parks with the opening of two large concrete pools.





Natural beauty is undisturbed at all state parks.



Crowds immediately took advantage of the added facilities and flocked to the new activity.

Following the successful results of beach stabilization from the experimental groins built of palmetto logs, permanent-type groins of creosoted timbers are being constructed at Edisto Beach and Hunting Island State Parks. The findings indicated a noticeably building back of the shore line and the creating of sand dunes. We are encouraged at the prospects for erosion control at these two ocean-side parks.

Conservation training schools and nature clubs continue to study in the parks. Easter sunrise services are becoming an established feature; school groups are going camping, transferring the school room to the out-of-doors; successful day camps are being operated in at least three parks; while the organized camps and family vacation cabins are over-subscribed.



Many activities are carried on at state parks. Square dancing is a popular pastime.



The program of permanent construction, repairs and maintenance, was carried out in a highly satisfactory manner, and park visitors are being greeted this summer with many improvements.

A new area of 7,088 acres of surplus Camp Croft property was formally acquired and added to the original gift of 47 acres from the Spartanburg Foundation, thereby creating a large new acreage for the Croft State Park, second in size only to Cheraw.

One new family cabin was constructed at Edisto Beach State Park, the Hunting Island Beach Village was re-surveyed and additional lots gained to replace those lost in the storm; and a superintendent's residence built at Santee State Park.

Considerable time and planning was given to the proposed "Fort Moultrie State Park and Historical Monument"—the final disposition of which is currently unsettled.

A beautiful new folder describing accommodations at all state parks has been issued; the first complete publication of this nature since before the war.

The nineteen state parks, five waysides and six historical areas, are located as follows:

Name of Park	Acreage	Location
Aiken .....	867	Aiken County
Barnwell .....	252	Barnwell County
Cheraw .....	7,361	Chesterfield County
Chester .....	523	Chester County
Croft .....	7,135	Spartanburg County
Edisto .....	1,255	Charleston County
Givhans Ferry.....	1,235	Dorchester and Colleton Counties
Greenwood .....	1,114	Greenwood County
Hunting Island .....	5,000	Beaufort County
Kings Mountain .....	6,141	York and Cherokee Counties
Lee .....	2,839	Lee County
Myrtle Beach .....	323	Horry County
Oconee .....	1,165	Oconee County
Paris Mountain .....	1,275	Greenville County
Poinsett .....	1,000	Sumter County
Rivers Bridge Confederate Memorial.....	390	Bamberg County
Santee .....	2,364	Orangeburg County
Sesqui-Centennial .....	1,500	Richland County
Table Rock .....	2,860	Pickens County
TOTAL.....	44,599	

#### WAYSIDE PARKS

Name of Wayside Park	Acreage	Location
Aiken .....	35	Aiken County
Colleton .....	35	Colleton County
Greenville .....	63	Greenville County
Greenwood .....	30	Greenwood County
Kershaw .....	31	Kershaw County
TOTAL.....	194	

#### HISTORICAL SITES

Name	Acreage	Location
Burial Ground of General Thomas Sumter..	4½	Sumter County
Burial Ground of Col. Isaac Hayne.....	1	Colleton County
Tomb of Thomas Heyward.....	—1	Jasper County
Tomb of General Andrew Pickens.....	—1	Oconee County
Tomb of General Francis Marion.....	—1	Berkeley County
Fort Watson.....	1¼	Clarendon County





Playfields at all state parks offer healthful outdoor recreation.

## OPERATIONS & MAINTENANCE DETAIL

A detailed listing of repairs and improvements follows:

### **Aiken:**

Bathhouse enlarged to give more space in dressing rooms and concession stand; bathing beach enlarged and improved; electricity extended to fishing cabins which were also repaired and painted.

### **Barnwell:**

Recreation Building repaired and painted and floors refinished; new deep well for beach improvement; new pump house; bathhouse enlarged to give more basket space and concession room; bathhouse re-roofed; new lights added in picnic area; small picnic shelter built; caretaker's house repaired and painted.



**Cheraw:**

Major general repair program costing approximately \$7,000, including extending electric lights throughout the two group camps. Construction of a new park assistant's residence.

**Campbell's Pond Park for Negroes:**

General improvement program for this area, making it more serviceable and attractive to the hundreds of colored users.

**Chester:**

New picnic shelter constructed and picnic area developed; new playfield under construction; boathouse remodeled and moved; recreation building screened.

**Croft:**

This new state park named by local contest. Operating funds made available and swimming pool and picnic area now in operation. New children's wading pool donated by Rotary Club of Spartanburg.

**Edisto:**

General repair program; new vacation cottage constructed; new drinking fountain and public water station set up on highway at park entrance; groin for beach erosion control under construction by the State Highway Department on state park property.

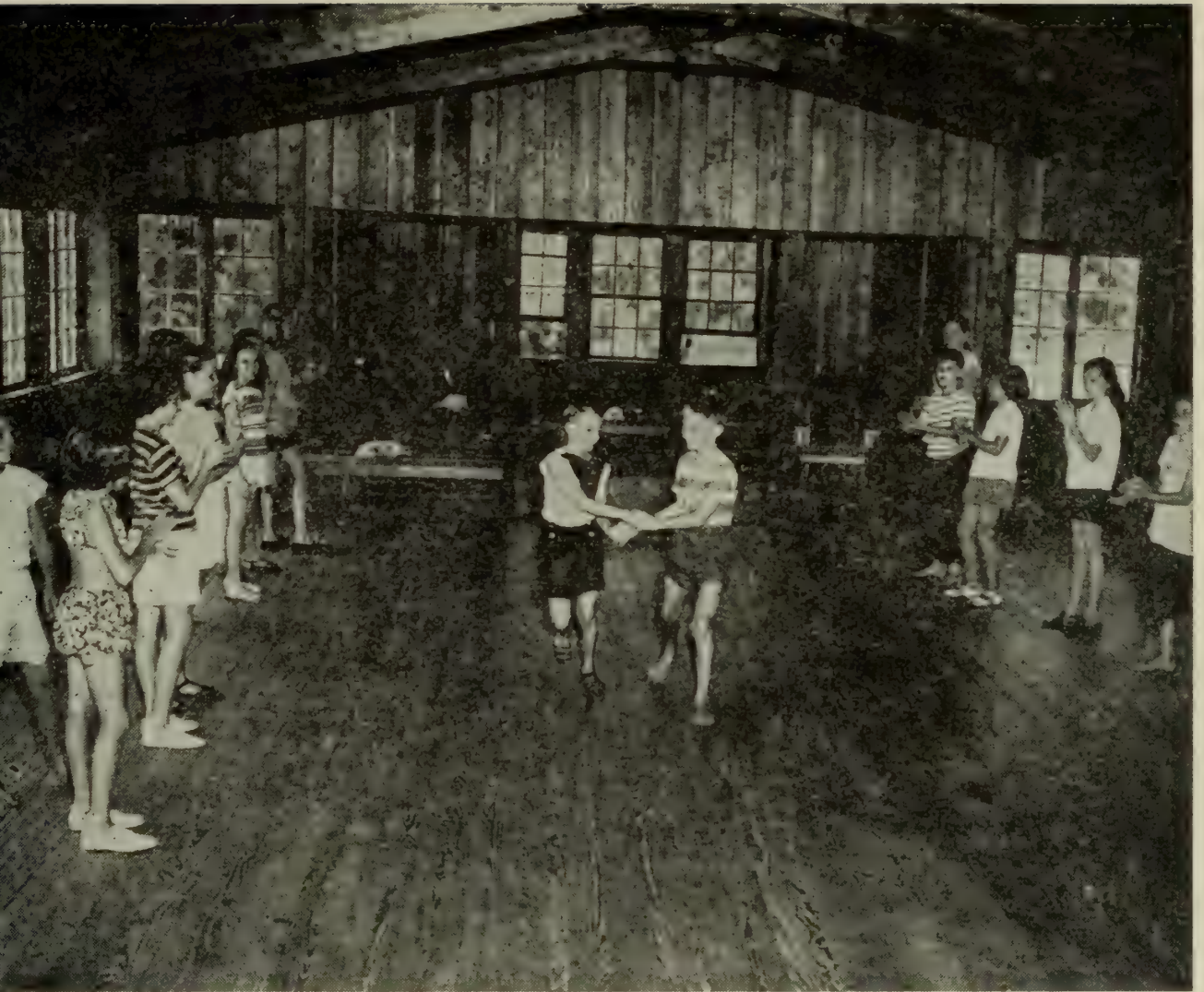
**Givhans Ferry:**

General repair program. Electricity extended to picnic area.

**Greenwood:**

Major repair program including improvements at boat landing; new picnic shelter and latrines constructed; electricity extended to new areas; new fireplaces and drinking fountains installed.





The beauty and fun of folk dances and many outdoor activities are enjoyed by day campers at state parks.

### **Hunting Island:**

Beach village re-surveyed; lots staked out and additional lots plotted in new area to replace those lots washed away by beach erosion. Road into beach village under construction. New picnic shelter constructed. Two groins for beach erosion control built by State Highway Department, with two or more of permanent type construction to follow.

General improvements in Negro area.

### **Kings Mountain:**

Major maintenance and general improvement program; road being paved into Lake Crawford day-use area.



**Lee:**

New power line extended throughout park. State Highway 22 being paved from U. S. 15 to park entrance. Fishing cabins repaired and painted.

**Myrtle Beach:**

General repair program including replacing of numerous sills and underpinning timbers; fishing pier being planned with funds contributed by Springs Cotton Mill.

**Oconee:**

Road system being improved and paved; parking area for picnic shelter enlarged, new water system; new park entrance; all twenty cabins now equipped with electric refrigerators and electric cook stoves.

**Paris Mountain:**

New picnic shelter at Sulphur Springs; concrete foundation for additional picnic shelter poured; barbecue shelter relocated; paved walkways constructed around bathhouse area; bathhouse re-roofed; general improvement to Camp Buckhorn.

**Poinsett:**

General improvement program; new residence for park foreman built by park labor.

**Burnt Gin Group Camp:**

New terraces constructed throughout camping area and planted with grass; new tables for dining room; new rat-proof storage house.

**Mill Creek Group Camp and Day-Use Area (Negro:**

New terraces constructed throughout camping area and planted with grass. New day-use area developed including bathhouse, bathing beach and picnic areas; new power line being added.





State parks serve as outdoor classrooms for teaching nature, history and conservation.

#### **Rivers Bridge:**

Splendid flowing well completed; concrete swimming pool constructed; electric lines and water lines extended to new areas. Fishing boats added.

#### **Santee:**

New picnic shelter completed; also latrines, fireplaces; dam at clear water lake rebuilt and riprapped. Residence for superintendent constructed. Park operations being started this summer.

#### **Sesqui-Centennial:**

New picnic shelter completed; new water storage system completed; general improvement program.

#### **Table Rock:**

Three additional family cabins completed; new picnic shelter constructed at Four Oaks Area. New work-garage under construction.



S. C. STATE COMMISSION OF FORESTRY  
DIVISION OF STATE PARKS  
Summary of State Park Use, July 1, 1948-June 30, 1949

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathroom Users	No. Out-of- State Cars	Total No. of Cars	No. Visitors Under 18	Total No. of Visitors
Aiken .....	.....	.....	1,160	11,932	4,309	2,251	1,064	7,304	10,713	27,132
Barnwell .....	.....	.....	481	21,278	3,902	2,322	845	11,414	10,946	35,753
Campbells Pond (Col.) .....	.....	.....	4	187	3,468	2,534	228	1,451	3,058	5,898
Cheraw .....	398	2,960	1,338	16,371	42,697	20,008	9,675	28,230	47,180	93,590
Chester .....	.....	.....	308	9,293	.....	.....	1,079	12,979	9,383	29,607
Edisto Beach .....	248	1,159	2,693	16,357	10,833	2,688	957	8,801	17,376	38,565
Givhans Ferry .....	75	473	178	8,110	4,509	714	3	5,749	6,508	20,519
Greenwood (White) .....	.....	.....	1,532	38,305	.....	.....	395	20,136	.....	83,415
Greenwood (Col.) .....	.....	.....	28	1,575	.....	.....	.....	420	.....	1,915
Hunting Island (White) .....	.....	.....	1,738	9,573	21,161	7,951	3,408	15,327	16,272	59,089
Hunting Island (Col.) .....	.....	.....	304	2,426	2,380	.....	272	1,826	2,090	7,419
Kings Mountain .....	.....	.....	1,144	11,281	9,470	6,841	10,189	15,464	16,287	66,445
Lee .....	.....	.....	467	8,650	6,204	3,078	117	4,905	4,621	20,507
Myrtle Beach .....	2,163	10,813	2,492	36,341	19,343	3,004	5,009	26,493	10,429	85,955
Oconee .....	1,472	9,012	3,380	15,534	17,223	6,871	597	23,251	6,943	90,136
Paris Mountain .....	.....	.....	3,489	43,757	15,063	9,699	1,878	37,261	21,994	169,247
Poinsett .....	412	3,006	2,153	24,505	13,129	9,556	388	13,117	20,755	50,081
Poinsett (Col.) .....	.....	.....	287	6,310	2,111	1,740	15	1,860	8,125	10,947
Rivers Bridge .....	.....	.....	141	6,130	1,143	.....	207	8,469	.....	22,184
Sesqui-Centennial .....	.....	.....	13,091	156,191	126,811	11,994	7,615	56,123	106,452	311,121
Table Rock .....	1,193	6,937	2,973	30,685	23,627	5,742	2,543	25,784	40,021	113,784
Aiken Wayside .....	.....	.....	46	349	.....	.....	369	2,502	2,150	8,707
Colleton Wayside .....	.....	.....	1,185	6,938	.....	.....	2,457	5,576	6,912	24,772
Greenville Wayside .....	.....	.....	69	588	.....	.....	.....	1,075	1,377	3,551
Greenwood Wayside .....	.....	.....	311	4,488	.....	.....	13	855	1,669	3,440
TOTALS .....	5,961	34,360	40,992	487,154	327,383	96,993	49,323	336,372	371,261	1,383,779





Many families spend their vacation at state parks. Family cabins, completely equipped except for bed linen and table silver, are available at 7 state parks.



## VACATION ACCOMMODATIONS

### Cabins:

The seventy-nine State Park cabins at Table Rock, Oconee, Cheraw, Poinsett, Givhans Ferry, Myrtle Beach and Edisto Beach were reserved for the entire season by families on vacation. In addition, the off-season use of these facilities is steadily increasing and it is not unusual to find cabin users in the Parks from early spring until well into the winter months.

### Group Camps:

Organized camping groups continued to seek the facilities of our seven group camps at Paris Mountain, Kings Mountain, Cheraw and Poinsett, for their summer outings. Such groups as Boy and Girl Scouts, YW and YMCAs, Church and School groups, and crippled children, held encampments of from one to eight weeks at these well-equipped group camp areas.

Mill Creek Camp on Poinsett forest is limited to Negro groups, and enjoys good usage and is the scene of the annual Orthopedic Camp of the State Board of Health.

Refreshment stands are open in all state parks during the vacation season, while at Oconee, Table Rock and Poinsett, are well-appointed tea rooms where delicious meals may be had. The tea rooms are also in demand by clubs and other groups for evening meals and meetings.

Fishing may be enjoyed at all state parks. No charge for this recreational sport is imposed; however, boats are available at a rental fee. Established State game and fish laws are operative in the parks.

Large, well equipped buildings for use as community centers and recreation activities are available at Barnwell, Cheraw, Chester, Givhans Ferry, Myrtle Beach, Oconee and Table Rock.

These facilities make a year-round contribution to the social life of the young people of the countryside as well as serving as a meeting place for conventions, family reunions, day camp headquarters, and general group gatherings.





South Carolina's natural beauty is preserved in the state parks.

### **Negro Areas:**

Although we have state park areas for Negroes established at Greenwood, Cheraw, Poinsett and Hunting Island, other areas are under consideration in order that increased facilities may be had for the colored people of the State. It is hoped that funds will be appropriated by the forthcoming Legislature to build some of the permanent improvements needed at the present Parks, and the acquisition of additional areas, as this Department considers this need of primary importance in our program.





Fishing is a popular sport at all state parks.



TABLE OF FACILITIES AT STATE PARKS

NAME OF STATE PARK and Post Office Address or Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Recreation Bldg.	Tea Room	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Negro Areas
AIKEN STATE PARK Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x			x		x		
BARNWELL STATE PARK Blackville, S. C.....	x	x	x	x	x	x	x			x		x		x		
CHERAW STATE PARK Cheraw, S. C.....	x	x	x	x	x	x	x	x		x		x	x	x	x	x
CHESTER STATE PARK Chester, S. C.....	x	x	x			x	x			x		x		x		
CROFT STATE PARK Spartanburg, S. C., RFD.....	x	x		x	x							x		x		
EDISTO BEACH STATE PARK Edisto Island, S. C.....	x	x	x	x	x		x	x				x		x		
GIVHANS FERRY STATE PARK Ridgeville, S. C., RFD.....	x	x		x	x	x	x	x		x		x		x		
GREENWOOD STATE PARK Ninety Six, S. C., RFD.....	x	x	x			x	x					x		x		x
HUNTING ISLAND STATE PARK Frogmore, S. C.....	x	x	x	x	x		x					x		x		x
KINGS MOUNTAIN STATE PARK Kings Creek, S. C. RFD.....	x	x		x	x	x	x					x		x	x	
LEE STATE PARK Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x			x		x		
MYRTLE BEACH STATE PARK Myrtle Beach, S. C.....	x	x		x	x		x	x		x		x		x		
OCONEE STATE PARK Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x		x	x	x	x	x	x	
PARIS MOUNTAIN STATE PARK Greenville, S. C., RFD.....	x	x	x	x	x	x	x					x	x	x	x	
POINSETT STATE PARK Wedgefield, S. C.....	x	x	x	x	x	x	x	x		x	x	x		x	x	x
RIVERS BRIDGE CONFEDERATE MEMORIAL STATE PARK Ehrhardt, S. C., RFD.....	x	x	x	x	x	x	x					x		x		
SANTEE STATE PARK Elloree, S. C., RFD.....	x	x				x	x									
SESQUI-CENTENNIAL STATE PARK Columbia, S. C., RFD.....	x	x		x	x	x	x					x		x		
TABLE ROCK STATE PARK Pickens, S. C., RFD.....	x	x		x	x	x	x	x		x	x	x		x		

Note:—For overnight camping, Write in advance to Park Superintendent.





Swimming in "safe" water under the watchful eye of trained lifeguards is enjoyed by people of all ages.



## RECOMMENDATIONS

Further expansion of the State Park system is questionable, and careful study should be made before adding to the number of state parks already in existence, other than a park in the Pee Dee area; on Clark's Hill development; and three more Negro parks.

Additional physical structures in form of recreational buildings, park residences, picnic shelters, group camps and bathing facilities are needed as follows:

*Recreation Buildings*—Aiken, Lee.

*Picnic Shelters*—Hunting Island, Rivers Bridge, Paris Mt.

*Residence for Park Workers*—Aiken, Chester, Edisto, Givhans, Hunting Island, Lee, Myrtle Beach, Oconee, Poinsett, Mill Creek, Rivers Bridge, Croft, Table Rock.

*Swimming Facilities*—Givhans (pool), Greenwood (beach).

*Group Camp*—Table Rock, Oconee, Sesqui, Croft, Edisto.

*Family Cabins*—Edisto, Kings Mt., Paris Mt.

There should commence the development program at the new parks—Croft and Santee. Both areas have a long-range master plan and the priority order for the next fiscal year calls for:

### **Croft State Park:**

Residences for park superintendent and assistant, water and electric systems, utility building (work center), two or more picnic areas, system of roads and trails, begin construction of dam on Kelsey Creek, improvements to swimming pool including painting and under-water lights.

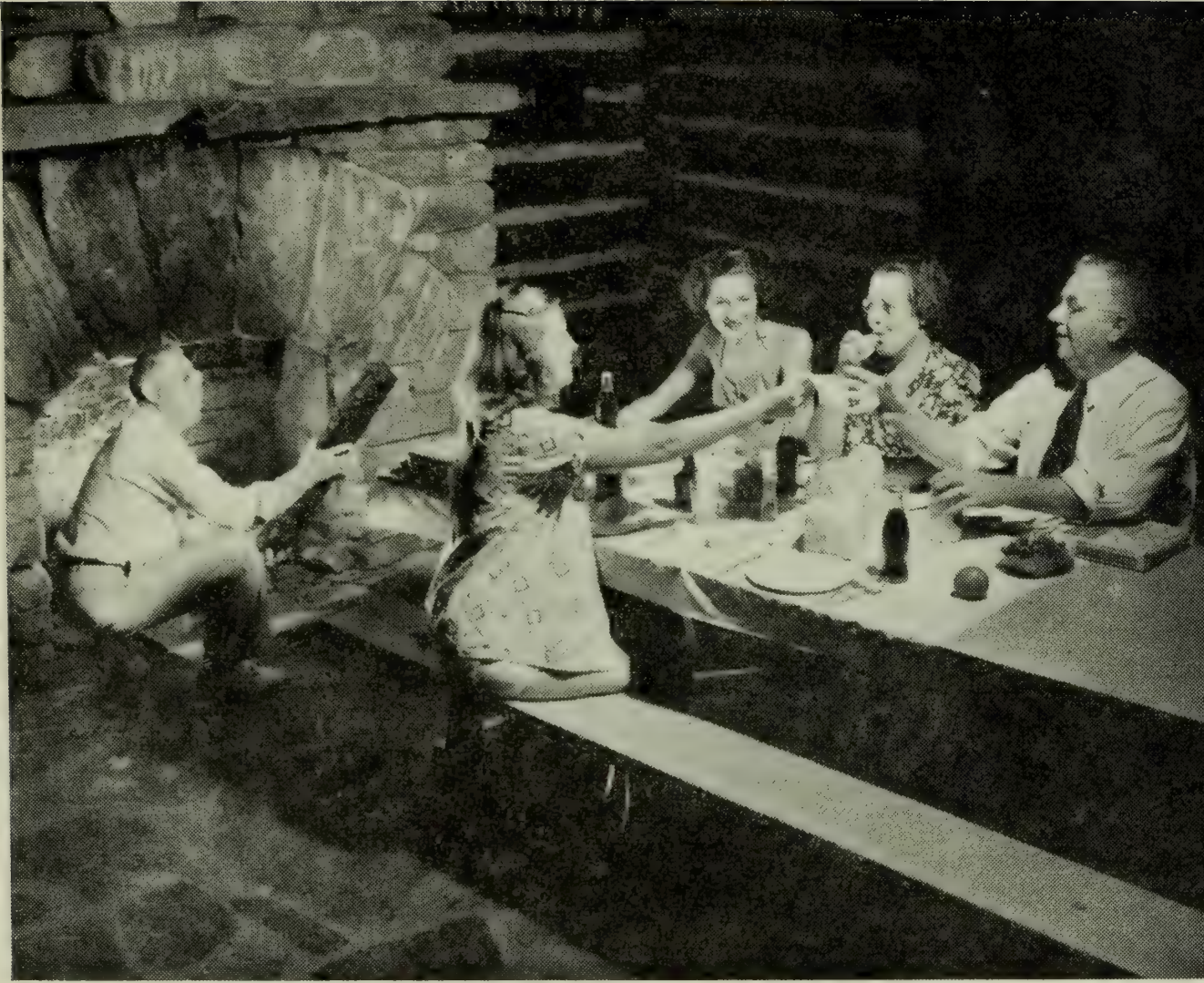
### **Santee State Park:**

System of park roads, beach improvement and bathhouse construction, latrine at picnic area, electric pump at picnic area, fishing-vacation cabins, boat basin with floating dock, utility building (work center), extend electric lines to picnic and other areas; also 3 miles of telephone lines.

### **Clark Hill Reservoir:**

A budget should be provided for the fiscal year 1950-51 in order to begin development of the two state parks on the Clark Hill Reservoir—Baker Creek for Whites and Hickory Knob for Colored—so that we may keep step with the program of the U. S. Engineers on the over-all project.





Picnicking is a popular attraction at all state parks.



# APPENDIX

## FINANCIAL STATEMENT

### SOUTH CAROLINA COMMISSION OF FORESTRY

July 1, 1948 — June 30, 1949

#### Receipts

#### Division of Forestry:

Balance from 1947-48 Federal Fund .....	\$ 349.84
Balance from 1947-48 Trust Fund .....	8,393.92
Trust Fund—Aiken Forest .....	4,706.65
State Appropriation—Operating Supplemental State Appropriation from 1947-48 .....	650,000.00
Supplemental State Appropriation—1948-49 .....	30,712.33
Allotment from Civil Contingent Fund .....	6,007.79
Federal Funds—Prot. CM Law, Sec. 2 .....	15,000.00
Federal Funds—Reforestation, CM Law, Sec. 4 & N-D .....	344,291.00
Federal Funds—Farm Forestry Nursery .....	2,800.00
State & County Forests .....	2,071.46
Tractor Project (Firebreaks) .....	58,816.45
Marking and Tallying Timber .....	24,110.90
Miscellaneous .....	8,531.00
Transferred from General Fund Revenue—Petty Cash .....	5,935.04
	1,303.00
	235.91
Total Receipts .....	<hr/> \$1,163,265.29
Less Receipts Deposited to Credit of State Revenue Account .....	103,859.65
Total Receipts Available for Expenditure .....	<hr/> 1,059,405.64
Total Expenditures .....	1,046,674.10
Balance—Division of Forestry .....	<hr/> \$ 12,731.54*



## Division of State Parks:

Balance from 1947-48 (Deposits —Hunting Island) .....	\$ 4,769.15
State Appropriation — Operat- ing .....	259,807.00
Supplemental State Appropria- tion 1947-48—Repairs .....	25,292.77
Supplemental State Appropria- tion 1947-48—Ear-Marked .....	79,548.01
Supplemental State Appropria- tion—1948-49 .....	5,000.00
Allotment — Civil Contingent Fund, Rivers Bridge .....	7,500.00
Allotment — Civil Contingent Fund, Croft Land Purchase .....	15,000.00
Appropriation — Ft. Watson Memorial Area .....	1,500.00
Transferred from General Fund Revenue—Petty Cash .....	763.67
Cabin & Group Camp Rentals .....	25,861.00
Concession & Dining Rooms .....	6,648.39
Bathhouse & Swimming .....	20,513.97
Boat Rentals .....	3,464.50
Miscellaneous .....	2,040.55
<hr/>	
Total Receipts .....	\$ 457,709.01
Less Receipts Deposited to Credit of State Revenue Account .....	\$ 58,528.41
<hr/>	
Total Receipts Available for Expenditure .....	399,180.60
Total Expenditures .....	394,451.45
<hr/>	
Balance—Division of State Parks .....	4,729.15**



**Expenditures**

Administrative and Technical	\$ 278,388.75	
State Forest Nursery	82,783.01	
State Forest Projects	42,925.33	
County Forest Projects	4,295.18	
Firebreak Projects	12,032.18	
Fire Protection	621,650.09	
Farm Forestry Project	4,363.65	
Refunds—Petty Cash	235.91	
		<hr/>
Total—Division of Forestry		1,046,674.10
Total—Division of State Parks		394,451.45
		<hr/>
Total—All Expenditures		\$1,441,125.55

**Recapitulation****Funds Available:**

Division of Forestry	1,059,405.64	
Division of State Parks	399,180.60	
		<hr/>
		\$1,458,586.24

**Expenditures:**

Division of Forestry	1,046,674.10	
Division of State Parks	394,451.45	
		<hr/>
		\$1,441,125.55
		<hr/>
		\$ 17,460.69*—**

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\* Aiken Forest Funds—\$7,937.31.

\* Federal Funds—\$4,794.23.

\*\* Hunting Island Deposits—\$4,729.15.







TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1948-49

UNIT	Organized Personnel							Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Members, Retainer Crews	Members, Flexible Crews	Total	Volunteer, FFFS Crews	Other Volunteers	
Abbeville .....	1	2	..	1	..	6	10	35	122	167
Aiken .....	1	4	2	5	..	13	25	32	..	57
Allendale .....	1	2	1	3	..	6	13	106	..	119
Anderson .....	1	2	..	3	..	6	12	200	..	212
Bamberg .....	1	2	1	2	..	5	11	66	..	77
Barnwell .....	1	2	1	3	..	10	17	90	..	107
Beaufort .....	2	2	1	3	..	8	16	18	94	128
Berkeley .....	1	4	1	3	..	16	25	23	317	365
Calhoun .....	1	2	1	2	..	3	9	11	..	20
Charleston .....	1	4	1	2	..	10	18	24	340	382
Cherokee .....	1	1	..	1	..	3	6	177	..	183
Chester .....	1	3	..	1	..	11	16	30	199	245
Chesterfield .....	1	3	1	4	..	19	28	197	216	441
Clarendon .....	1	3	1	3	..	14	22	71	259	352
Colleton .....	1	4	2	5	..	4	16	42	367	425
Darlington .....	1	2	1	3	..	5	12	30	..	42
Dillon .....	1	2	1	2	..	6	12	30	..	42
Dorchester .....	1	3	1	3	..	6	14	18	87	119
Edgefield .....	1	2	..	1	..	1	5	25	130	160
Fairfield .....	1	4	..	3	16	..	24	..	270	294
Florence .....	1	4	1	4	..	9	19	40	..	59
Georgetown .....	1	4	2	4	3	15	29	47	630	706
Greenville .....	1	3	..	4	..	7	15	110	..	125
Greenwood .....	1	2	..	2	..	4	9	42	226	277
Hampton .....	1	3	1	3	..	5	13	52	201	266
Horry .....	1	5	2	4	..	8	20	60	..	80
Jasper .....	1	3	1	2	..	4	11	22	104	137
Kershaw .....	1	3	2	6	..	11	23	186	299	508
Lancaster .....	1	3	..	2	..	..	6	82	172	260
Laurens .....	1	3	..	2	..	3	9	52	177	238
Lee .....	1	2	1	3	..	11	18	155	136	309
Lexington .....	1	3	2	5	..	8	19	64	..	83
Marion .....	1	3	1	3	..	7	15	30	..	45
Marlboro .....	1	3	1	3	..	6	14	35	..	49
McCormick .....	1	1	..	..	..	1	3	14	199	216
Newberry .....	1	2	..	2	..	2	7	31	242	280
Oconee .....	1	2	..	2	..	8	13	165	..	178
Orangeburg .....	1	5	2	5	..	7	20	102	..	122
Pickens .....	1	3	..	4	..	7	15	95	..	110
Richland .....	1	5	1	4	..	20	31	192	339	562
Saluda .....	1	2	..	1	..	1	5	29	130	164
Spartanburg .....	1	3	..	4	..	8	15	47	..	62
Sumter .....	1	3	1	3	..	16	24	172	237	433
Union .....	1	2	..	1	..	7	11	274	..	285
Williamsburg .....	1	5	1	4	..	17	28	149	483	660
York .....	1	2	..	4	..	..	7	209	..	216
TOTALS.....	47	132	35	134	19	344	710	3,681	5,976	10,367



TABLE 2—EDUCATIONAL WORK—PROTECTIVE ORGANIZATIONS—FISCAL YEAR 1948-1949

UNIT	Rangers and Wardens										Tower-men	
	Visits to Sawmills	Brush Burning Inspections	Notices Posted	Literature Distributed	People Interviewed	Talks at Schools	Forestry Picture Shows	News Releases	Educational Contests	Fire Law Prosecutions		Fire Law Convictions
Abbeville	6	17	944	13,301	929	4	9	13	34	1	1	147
Aiken	4	20	12	2,199	208	18	16	...	45	3	3	674
Allendale	18	28	227	5,764	773	16	8	...	12	3	3	58
Anderson	21	...	1,057	7,470	1,700	15	14	24	57	1	1	1,293
Bamberg	8	16	294	3,970	511	27	7	5	12	2	2	189
Barnwell	59	192	45	883	1,602	59	8	5	41	1	1	2,273
Beaufort	...	15	64	1,138	29	37	19	8	12	1	1	151
Berkeley	17	69	1,482	23,304	95	29	29	28	30	9	9	81
Calhoun	14	38	72	902	227	36	9	3	32	1	1	40
Charleston	...	8	...	500	56	59	21	37	66	12	11	549
Cherokee	12	32	630	6,403	881	8	20	34	39	4	4	2,207
Chester	2	34	417	2,979	1,175	24	10	18	42	7	7	1,910
Chesterfield	159	53	1,557	8,172	853	71	30	23	57	12	11	1,782
Clarendon	18	96	175	17,662	861	13	25	7	54	9	8	298
Colleton	2	...	...	500	1,017	35	21	4	40	1	...	1,643
Darlington	36	5	280	1,731	1,436	13	20	3	37	9	9	201
Dillon	9	22	298	1,846	1,007	24	15	2	36	9	9	435
Dorchester	42	...	...	500	691	9	14	3	24	1	1	74
Edgefield	17	...	735	3,406	1,210	11	7	4	49	3	3	172
Fairfield	38	14	92	4,519	1,431	15	9	11	37	6	6	172
Florence	4	18	213	11,204	2,210	40	30	17	82	21	18	558
Georgetown	...	3	1,482	26,775	239	18	17	2	30	3	3	84
Greenville	...	5	206	6,603	1,154	3	16	34	77	13	13	2,652
Greenwood	4	5	571	2,917	19	2	11	12	40	1	1	541
Hampton	9	6	113	9,375	50	88	15	31	35	20	20	876
Horry	1	20	421	6,280	157	12	27	8	82	35	32	460
Jasper	6	38	41	1,367	515	17	18	4	20	3	3	81
Kershaw	...	...	...	...	...	...	...	...	...	...	...	...
Lancaster	43	13	1,547	8,683	592	89	36	9	55	6	6	2,015
Laurens	13	37	1,565	8,049	2,563	92	32	4	60	9	9	1,296
	7	103	279	1,745	199	11	11	7	47	1	1	666



Lee .....	31	54	1,491	8,024	1,616	87	14	10	35	17	17	1,853
Lexington .....	9	27	121	9,425	1,853	51	18	13	32	5	5	881
Marion .....	7	12	278	9,204	1,047	18	25	11	38	12	12	345
Marlboro .....	....	10	180	5,156	652	2	19	6	37	3	2	440
McCormick .....	11	13	1,037	6,438	82	2	13	15	37	1	1	....
Newberry .....	16	15	36	1,785	776	3	26	14	40	6	6	483
Oconee .....	22	16	532	6,807	2,091	21	17	1	57	3	1	2,466
Orangeburg .....	5	5	450	728	432	61	11	1	58	19	19	91
Pickens .....	19	....	532	2,953	1,315	7	12	13	51	6	6	1,871
Richland .....	67	26	1,513	8,676	1,231	76	29	2	48	7	7	3,421
Saluda .....	20	23	185	3,569	2,772	62	9	16	44	1	1	39
Spartanburg .....	13	73	395	21,000	1,608	21	18	17	63	8	8	1,736
Sumter .....	31	76	1,451	8,495	860	122	35	31	56	6	6	1,587
Union .....	28	8	1,722	18,066	1,001	39	15	23	46	....	....	116
Williamsburg .....	4	18	342	27,179	640	19	35	4	58	4	4	163
York .....	11	43	939	17,742	1,506	12	16	21	80	3	3	755
TOTALS.....	863	1,326	26,023	336,394	43,872	1,498	836	566	2,064	311	295	39,826



**TABLE 3—FIREBREAKS CONSTRUCTED AND MAINTAINED WITH STATE  
OWNED EQUIPMENT—1948-49**

COUNTY	Number Landowners Cooperating	TRACTOR MILES PLOWED		Total Tractor Miles
		Construction	Maintenance	
Aiken .....	3	.....	30.3	30.3
Bamberg .....	1	.....	11.5	11.5
Barnwell .....	2	.....	23.8	23.8
Beaufort .....	1	5.6	20.7	26.3
Berkeley .....	2	53.7	.....	53.7
Calhoun .....	5	.....	81.0	81.0
Charleston .....	20	42.6	47.0	89.6
Chesterfield .....	1	.....	31.6	31.6
Colleton .....	9	22.7	181.9	204.6
Darlington .....	43	31.6	197.5	229.1
Dillon .....	12	.9	21.8	22.7
Dorchester .....	11	63.8	33.2	97.0
Georgetown .....	3	.....	76.2	76.2
Horry .....	2	.....	22.0	22.0
Lee .....	1	.....	13.7	13.7
Marion .....	4	1.9	25.9	27.8
Orangeburg .....	4	9.1	93.3	102.4
Richland .....	8	16.9	64.8	81.7
Sumter .....	11	15.0	106.3	121.3
Williamsburg .....	9	36.3	226.0	262.3
TOTALS.....	152	300.1	1,308.5	1,608.6



TABLE 4—SUMMARY OF FIRES BY MONTHS—JULY 1, 1948—JUNE 30, 1949

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	135	2.6	2,331.4	17.3
August .....	87	1.7	1,438.1	16.5
September .....	96	1.9	1,172.4	12.2
October .....	147	2.8	982.4	6.7
November .....	132	2.6	1,685.1	12.8
December .....	121	2.3	1,095.0	9.0
January .....	1,110	21.5	18,625.8	16.8
February .....	756	14.6	13,676.1	18.1
March .....	1,739	33.7	35,160.4	20.2
April .....	643	12.4	12,929.0	20.1
May .....	149	2.9	2,240.2	15.0
June .....	51	1.0	332.3	6.5
TOTALS.....	5,166	100.0	91,668.2	17.7



TABLE 5—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1948-49

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Unknown		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	..	6.3	12	27.7	7	71.4	7	41.4	19	297.2	..	626.6	1	2.4	3	10.6	..	.....	49	450.7
Aiken	3	2.0	6	57.9	7	95.3	74	877.3	24	261.1	25	537.0	3	2.3	23	1,409.6	..	.....	165	3,336.4
Allendale	1	..	14	135.7	..	..	34	115.2	20	115.6	44	18.4	2	6.0	7	62.8	..	.....	122	974.3
Anderson	..	..	4	4.6	5	34.5	16	69.5	32	87.7	2	63.7	..	..	3	5.1	1	4.0	63	223.8
Bamberg	..	..	..	..	..	..	42	415.4	51	479.8	7	55.1	1	6.0	..	..	13	122.5	114	1,087.4
Barnwell	..	..	6	28.4	..	..	119	1,258.9	9	100.0	4	1,196.4	..	..	1	0.4	..	..	139	1,442.8
Beaufort	..	..	..	..	..	..	19	210.9	18	304.5	71	3,863.3	..	..	1	5.0	..	..	109	1,716.8
Berkeley	2	45.0	8	28.5	6	26.5	35	382.5	23	1,053.5	202	74.3	4	78.0	9	30.1	2	19.0	291	5,526.4
Calhoun	2	1.2	1	7.0	3	26.1	55	246.1	13	53.8	5	74.3	..	..	2	10.5	2	16.5	83	435.5
Charleston	..	..	8	125.2	10	88.8	33	427.3	31	725.2	109	1,586.9	6	90.3	3	11.1	..	..	200	3,054.8
Cherokee	..	..	7	32.3	..	..	16	92.7	12	69.1	4	13.2	..	..	1	9.9	..	..	40	217.2
Chester	..	..	2	4.5	..	..	12	110.3	13	126.8	1	2.1	1	29.0	4	72.5	3	130.7	36	475.9
Chesterfield	1	160.0	4	37.9	7	69.5	15	147.7	18	503.0	31	1,732.3	..	..	11	216.3	..	..	87	2,866.7
Clarendon	..	..	..	..	..	..	40	431.1	26	459.4	119	3,621.6	1	3.0	2	55.0	1	15.0	189	4,585.1
Colleton	3	7.6	4	20.8	1	1.5	22	213.1	40	543.2	57	806.2	2	13.0	3	31.1	7	111.0	139	1,747.5
Darlington	1	20.0	4	29.6	7	90.0	28	328.1	14	128.3	10	30.9	1	3.9	4	33.6	4	53.7	73	718.1
Dillon	..	..	4	17.3	2	25.0	29	221.8	23	416.3	20	374.5	1	7.2	2	0.7	..	..	81	1,062.8
Dorchester	..	..	3	124.0	1	7.0	38	1,322.0	27	575.0	9	139.0	1	1.0	1	20.0	..	..	80	2,188.0
Edgefield	..	..	5	62.7	..	..	6	62.9	12	227.7	..	..	..	..	6	14.8	2	193.2	31	561.3
Fairfield	..	..	15	124.8	1	30.0	27	303.8	8	73.1	6	9.5	1	1.4	5	96.8	..	..	63	639.4
Florence	..	..	7	9.9	8	133.3	65	1,329.3	77	1,414.0	103	4,170.1	5	10.1	1	15.0	..	..	266	7,081.7
Georgetown	..	..	3	10.0	4	11.3	20	148.2	10	300.5	154	3,591.6	..	..	8	160.5	1	85.0	200	4,307.1
Greenville	..	..	4	6.8	1	2.0	36	297.8	21	185.6	39	206.3	..	..	18	138.2	..	..	119	836.7
Greenwood	..	..	13	70.6	5	25.5	13	123.4	24	142.6	..	..	..	..	10	59.6	7	72.6	72	494.3
Hampton	1	40.0	..	..	1	10.0	12	68.4	14	163.9	34	512.0	..	..	..	..	..	..	62	794.3
Horry	4	326.9	4	30.7	8	91.1	54	1,202.5	55	1,833.9	29	2,109.2	2	86.1	91	4,390.4	24	1,428.9	271	11,499.7
Jasper	..	..	5	71.1	2	84.0	36	1,028.6	23	467.9	19	1,140.3	1	2.0	12	664.4	2	4.5	100	3,462.8
Kershaw	2	4.5	15	65.9	1	1.0	32	267.2	8	200.0	11	214.7	2	3.4	2	2.0	..	..	73	758.7
Lancaster	..	..	4	12.6	..	..	26	388.3	13	131.6	5	153.5	..	..	6	11.9	..	..	54	697.9
Laurens	..	..	8	60.3	7	89.0	44	269.3	22	158.1	4	8.6	..	..	1	5.0	..	..	86	590.3
Lee	..	..	..	..	1	4.5	20	94.3	10	120.1	4	9.8	4	72.8	1	5.0	..	..	40	306.5
Lexington	..	..	4	12.0	7	125.0	33	120.0	29	94.4	15	364.1	2	5.0	6	23.7	..	..	96	744.2
Marion	..	..	1	15.0	1	0.3	23	246.9	18	226.6	29	611.0	2	7.3	3	24.2	1	0.3	78	1,131.6



Marlboro .....	7	111.4	6	89.4	30	220.5	16	371.3	70	892.7	..	5	29.6	..	49.3	134	1,714.9
McCormick .....	24	287.7	1	45.0	8	33.0	11	176.5	2	19.5	5	..	..	2	38.6	53	636.0
Newberry .....	4	51.0	..	..	10	29.5	11	86.0	..	..	3	..	..	3	..	31	221.6
Oconee .....	5	15.3	..	..	11	61.1	28	286.0	6	69.4	5	..	16.5	..	..	59	663.9
Orangeburg .....	8	89.3	8	95.9	58	343.4	59	947.6	426	7,660.9	3	..	55.0	1	11.1	568	9,254.7
Pickens .....	..	..	..	..	14	33.6	16	78.9	8	86.8	..	..	40.7	..	..	44	240.0
Richland .....	10	271.9	3	14.2	66	811.3	23	125.4	35	506.8	1	..	122.2	..	..	145	1,853.0
Saluda .....	1	1.0	..	..	9	98.1	11	87.9	1	0.9	..	..	13.1	3	59.5	31	260.5
Spartanburg .....	8	51.4	1	22.0	11	72.7	12	615.0	..	..	1	..	151.1	..	..	37	918.6
Sumter .....	2	5.2	6	49.5	42	402.5	19	270.7	24	463.4	3	..	55.0	..	..	101	1,607.9
Union .....	16	129.4	1	7.2	6	38.6	9	112.2	3	166.1	..	..	72.2	1	51.0	44	576.7
Williamsburg .....	3	45.1	1	15.0	26	755.1	40	1,067.0	92	4,136.6	5	..	346.7	..	..	173	7,202.2
York .....	3	35.5	1	2.1	35	223.2	31	171.8	..	..	..	..	68.9	..	..	75	501.5
TOTALS.....	266	2,328.0	131	1,482.9	1,407	15,984.8	1,043	16,435.8	1,839	41,845.3	66	1,909.1	8,578.8	80	2,466.4	5,166	91,668.2

TABLE 6—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1948-49

UNIT	Class A		Class B		Class C		Class D		Class E		Total Number	Percent of Total Number
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Abbeville	1	3	40	1.3	7	9	1	7	...	...	49	9
Aiken	12	3.6	123	3.9	24	1.6	5	3.7	1	14.3	165	2.2
Allendale	4	1.2	101	3.2	14	9	3	2.3	...	...	122	2.4
Anderson	8	2.4	51	1.6	4	3	...	...	...	...	63	1.2
Bamberg	1	3	87	2.7	26	1.7	...	...	...	...	114	2.2
Barnwell	6	1.8	94	3.0	39	2.3	...	...	...	...	139	2.7
Beaufort	5	1.5	76	2.4	25	1.6	3	2.3	...	...	109	2.1
Berkeley	15	4.5	183	5.8	88	5.8	5	3.7	...	...	291	5.6
Calhoun	13	3.9	62	2.0	8	5	...	...	...	...	83	1.6
Charleston	7	2.1	125	3.9	67	4.4	1	7	...	...	200	3.9
Cherokee	4	1.2	32	1.0	4	3	...	...	...	...	40	8
Chester	2	6	21	7	13	9	...	...	...	...	36	7
Chesterfield	12	3.6	35	1.1	35	2.3	4	3.0	1	14.3	87	1.7
Clarendon	15	4.5	94	3.0	73	4.8	7	5.2	...	...	189	3.7
Colleton	7	2.1	88	2.8	44	2.9	...	...	...	...	139	2.7
Darlington	10	3.0	47	1.5	15	1.0	1	7	...	...	73	1.4
Dillon	15	4.5	47	1.5	17	1.1	2	1.5	...	...	81	1.6
Dorchester	...	...	39	1.3	35	2.3	6	4.5	...	...	80	1.5
Edgefield	2	6	23	7	4	3	2	1.5	...	...	31	6
Fairfield	1	3	45	1.4	17	1.1	...	...	...	...	63	1.2
Florence	10	3.0	124	3.9	123	8.1	9	6.8	...	...	266	5.1
Georgetown	14	4.2	115	3.6	63	4.1	7	5.2	1	14.3	200	3.9
Greenville	22	6.6	76	2.4	20	1.3	1	7	...	...	119	2.3
Greenwood	...	...	58	1.8	14	9	...	...	...	...	72	1.4
Hampton	1	3	45	1.4	15	1.0	1	7	...	...	62	1.2
Horry	18	5.4	91	2.9	133	8.7	27	20.2	2	28.5	271	5.2
Jasper	11	3.3	45	1.4	36	2.4	8	6.0	...	...	100	1.9
Kershaw	8	2.4	47	1.5	18	1.2	...	...	...	...	73	1.4
Lancaster	6	1.7	36	1.1	10	7	2	1.5	...	...	54	1.0
Laurens	...	...	68	2.1	18	1.2	...	...	...	...	86	1.7
Lee	4	1.2	30	9	6	4	...	...	...	...	40	8
Lexington	11	3.3	73	2.3	12	8	...	...	...	...	96	1.9



Marion	10	3.0	43	1.4	23	1.5	2	1.5	....	....	78	1.5
Marlboro	15	4.5	74	2.3	43	2.7	2	1.5	....	....	134	2.6
McCormick	....	....	39	1.2	13	.9	1	.7	....	....	53	1.0
Newberry	....	....	25	.8	6	.4	....	....	....	....	31	.6
Oconee	1	.3	45	1.4	12	.8	1	.7	....	....	59	1.1
Orangeburg	4	1.2	333	10.5	221	14.5	10	7.5	....	....	568	11.0
Pickens	10	3.0	26	.8	8	.5	....	....	....	....	44	.9
Richland	8	2.4	97	3.1	38	2.5	2	1.5	....	....	145	2.8
Saluda	1	.3	23	.7	7	.5	....	....	....	....	31	.6
Spartanburg	1	.3	25	.8	10	.7	....	....	1	14.3	37	.7
Sumter	4	1.2	60	1.9	35	2.3	2	1.5	....	....	101	2.0
Union	....	....	34	1.2	9	.6	1	.7	....	....	44	.9
Williamsburg	28	8.3	69	2.2	57	3.7	18	13.5	1	14.3	173	3.3
York	7	2.1	52	1.6	16	1.0	....	....	....	....	75	1.5
TOTALS	334	100.0	3,166	100.0	1,525	100.0	134	100.0	7	100.0	5,166	100.0

TABLE 7—SUMMARY OF FIRES BY COUNTIES AND MONTHS—FISCAL YEAR 1948-49

UNIT	July 1948		Aug. 1948		Sept. 1948		Oct. 1948		Nov. 1948		Dec. 1948		Jan. 1949		Feb. 1949		Mar. 1949		April 1949		May 1949		June 1949	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	...	...	2	1.5	1	1.6	...	...	4	3.5	1	2.4	4	45.1	5	37.5	23	108.8	5	178.4	2	53.1	2	18.8
Aiken	8	43.5	5	19.3	5	17.0	...	60.8	4	12.5	8	51.0	27	347.1	17	336.5	50	962.1	20	1,453.2	10	23.1	2	10.3
Allendale	...	97.0	1	7.0	1	2.0	3	7.7	3	7.9	6	15.3	27	109.4	19	165.5	32	249.5	14	284.3	11	22.7	1	6.0
Anderson	2	7.1	2	5.0	1	0.3	2	1.3	...	...	1	1.4	5	10.6	3	14.4	27	98.5	18	82.2	2	3.0	...	...
Bamberg	1	1.0	...	...	...	...	...	...	3	...	9	61.5	47	370.9	17	172.2	29	336.3	8	124.0	...	...	...	...
Barnwell	2	...	...	...	...	...	...	...	3	21.5	1	45.3	47	319.3	12	162.1	54	419.5	19	358.2	2	12.0	1	52.0
Beaufort	4	158.3	1	20.0	...	...	...	...	1	12.6	4	99.4	26	251.1	30	451.3	29	298.6	7	405.3	3	20.2	...	...
Berkeley	3	458.8	7	16.1	6	20.3	...	21.8	14	174.1	11	150.7	77	1,664.4	51	1,238.2	86	1,476.8	16	157.4	14	147.8	...	...
Calhoun	3	4.4	...	...	...	...	...	...	2	7.3	2	4.5	15	54.6	16	71.9	32	260.0	5	16.8	5	12.8	1	0.9
Charleston	3	74.0	1	0.4	4	38.7	2	8.9	4	53.6	11	67.0	57	1,109.3	29	443.3	62	1,011.0	22	239.6	3	9.0	...	...
Cherokee	1	9.9	...	...	1	0.5	4	7.5	1	1.5	1	1.5	5	4.2	2	3.0	20	116.1	3	47.5	...	...	...	...
Chester	5	41.0	...	...	...	...	...	...	1	2.1	...	...	2	5.0	3	50.2	17	296.2	7	80.6	...	...	2	25.5
Chesterfield	1	0.2	2	167.0	4	104.8	1	0.1	3	8.9	1	36.0	8	53.0	7	124.1	41	940.9	15	1,404.6	2	4.1	1	0.8
Clarendon	...	...	...	...	...	24.5	6	54.6	3	65.0	3	28.4	45	1,008.7	42	702.2	67	2,381.1	15	450.6	4	13.0	2	23.0
Colleton	3	26.0	4	4.8	...	...	...	...	7	17.6	3	32.0	40	464.1	23	428.0	47	639.4	9	133.0	3	2.6	...	...
Darlington	...	...	3	125.0	3	50.9	8	6.9	5	41.4	2	20.0	13	102.3	5	30.2	18	238.4	12	78.4	3	22.0	2	2.6
Dillon	...	...	2	12.4	2	10.2	3	6.7	3	18.1	1	13.1	16	379.9	14	94.3	27	473.4	10	19.1	1	35.0	1	0.6
Dorchester	...	...	1	25.0	...	...	3	121.0	4	67.0	4	133.0	25	768.5	10	82.0	25	843.5	7	143.0	1	5.0	...	...
Edgefield	2	59.4	2	2.3	1	0.1	2	2.1	...	...	...	...	1	36.0	3	25.5	15	413.6	4	13.9	1	8.4	...	...
Fairfield	5	65.5	3	21.0	2	15.0	1	1.0	2	7.0	...	...	69	1,864.7	6	32.0	22	105.0	15	356.6	2	8.3	4	25.0
Florence	7	19.2	6	68.0	8	82.3	7	57.5	10	288.6	3	26.0	50	566.9	43	1,564.1	79	2,104.1	26	760.5	7	244.7	1	2.0
Georgetown	...	...	1	1.8	10	83.4	5	208.6	1	6.0	3	16.5	9	53.8	47	734.1	60	2,474.2	16	158.2	5	44.5	...	...
Greenville	2	1.8	...	...	2	1.1	7	25.0	2	0.2	1	0.4	16	45.3	3	10.6	61	383.5	31	360.2	1	0.1	...	...
Hampton	1	1.0	...	...	...	...	3	7.3	2	6.0	...	...	13	227.0	13	72.0	28	227.7	17	159.0	2	6.3	...	...
Horry	1	40.0	1	3.0	...	...	2	12.0	...	...	1	1.0	13	227.0	13	72.0	25	346.3	6	93.0	...	...	...	...
Jasper	8	346.1	11	223.8	9	149.7	9	62.6	9	255.3	2	0.6	62	3,540.4	36	1,353.1	75	4,030.5	38	1,226.9	10	293.0	2	17.7
Kershaw	1	3.0	...	...	...	...	2	0.6	1	2.0	5	21.3	25	424.8	31	1,588.4	23	1,210.6	11	203.1	1	9.0	...	...
Laurens	7	35.8	2	25.0	1	0.1	4	4.9	2	3.8	...	...	11	52.7	4	12.9	19	345.2	15	184.4	5	71.5	3	12.4
Lancaster	4	17.0	1	2.0	1	1.5	2	9.4	2	3.3	1	1.0	8	19.8	3	11.2	23	461.3	10	168.6	2	2.5	1	0.3
Lee	5	19.0	1	1.8	1	4.0	...	...	1	3.2	1	5.0	10	51.5	9	45.6	34	301.0	20	138.8	2	5.1	4	15.3
Lexington	...	...	...	...	...	...	3	4.3	1	4.0	1	1.0	10	128.4	4	11.6	10	123.9	10	33.1	1	0.2	...	...
Marion	5	7.6	4	8.1	4	6.2	7	23.3	2	3.1	1	0.3	14	35.6	9	42.4	36	558.0	10	47.0	4	12.6	...	...
	...	...	2	1.1	3	32.0	...	...	7	54.8	...	...	13	79.5	8	327.7	30	451.7	8	62.5	7	122.3	...	...





TABLE 8—CLASSIFICATION BY CAUSES—FISCAL YEAR 1948-49

CAUSES	Number of Fires	Percent Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	22	0.4	637.1	29.0
Railroads .....	266	5.2	2,328.0	8.8
Campers .....	131	2.5	1,482.9	11.3
Smokers .....	1,407	27.3	15,984.8	11.4
Debris Burning.....	1,043	20.2	16,435.8	15.8
Incendiary .....	1,838	35.6	41,844.4	22.8
Lumbering .....	67	1.3	1,910.0	28.5
Miscellaneous .....	312	6.0	8,578.8	27.5
Unknown .....	80	1.5	2,466.4	30.8
TOTALS.....	5,166	100.0	91,668.2	17.7

TABLE 9—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1944-45	1945-46	1946-47	1947-48	1948-49	Average for 5-year period
Lightning .....	0.3	0.3	0.2	1.2	0.4	0.5
Railroads .....	6.7	8.3	7.1	7.0	5.2	6.7
Campers .....	4.4	2.7	3.4	2.8	2.5	3.2
Smokers .....	33.1	29.7	27.7	31.2	27.3	29.3
Debris Burning.....	14.9	19.8	20.4	19.5	20.2	19.3
Incendiary .....	24.8	27.1	27.7	28.5	35.6	29.1
Lumbering .....	1.7	1.7	2.0	1.7	1.3	1.5
Miscellaneous .....	7.1	4.9	6.8	5.9	6.0	6.3
Unknown .....	3.0	5.5	4.7	2.2	1.5	4.1



TABLE 10—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1948-49

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	151,052	49	450.7	0.30	9.2
Aiken .....	460,426	165	3,336.4	0.72	20.2
Allendale .....	133,888	122	974.3	0.73	8.0
Anderson .....	182,018	63	223.8	0.12	3.6
Bamberg .....	128,332	114	1,087.4	0.85	9.5
Barnwell .....	151,146	139	1,442.8	0.95	10.4
Beaufort .....	303,655	109	1,716.8	0.57	15.8
Berkeley .....	361,017	291	5,526.4	1.53	19.0
Calhoun .....	125,064	83	435.5	0.35	5.2
Charleston .....	377,350	200	3,054.8	0.81	15.3
Cherokee .....	136,919	40	217.2	0.16	5.4
Chester .....	277,705	36	475.9	0.17	13.2
Chesterfield .....	314,118	87	2,866.7	0.91	33.0
Clarendon .....	233,546	189	4,585.1	1.96	24.3
Colleton .....	513,403	139	1,747.5	0.34	12.6
Darlington .....	213,842	73	718.1	0.34	9.8
Dillon .....	146,687	81	1,062.8	0.72	13.1
Dorchester .....	274,308	80	2,188.0	0.80	27.4
Edgefield .....	170,918	31	561.3	0.33	18.1
Fairfield .....	353,311	63	639.4	0.18	10.1
Florence .....	331,676	266	7,081.7	2.14	26.6
Georgetown .....	461,946	200	4,307.1	0.93	21.5
Greenville .....	289,649	119	836.7	0.29	7.0
Greenwood .....	195,565	72	494.3	0.25	6.9
Hampton .....	241,703	62	794.3	0.33	12.8
Horry .....	566,115	271	11,499.7	2.03	42.4
Jasper .....	304,450	100	3,462.8	1.14	34.6
Kershaw .....	341,215	73	758.7	0.22	10.4
Lancaster .....	203,722	54	697.9	0.34	12.9
Laurens .....	237,952	86	590.3	0.25	6.9
Lee .....	113,582	40	306.5	0.27	7.7
Lexington .....	298,574	96	744.2	0.25	7.8
Marion .....	227,226	78	1,131.6	0.50	14.5
Marlboro .....	154,138	134	1,714.9	1.11	12.8
McCormick .....	132,502	53	636.0	0.48	12.0
Newberry .....	172,187	31	221.6	0.13	7.1
Oconee .....	226,479	59	663.9	0.29	11.3
Orangeburg .....	327,400	568	9,254.7	2.83	16.3
Pickens .....	194,326	44	240.0	0.12	5.5
Richland .....	303,436	145	1,853.0	0.61	12.8
Saluda .....	159,821	31	260.5	0.16	8.4
Spartanburg .....	232,748	37	918.6	0.39	24.8
Sumter .....	245,761	101	1,607.9	0.65	15.9
Union .....	151,531	44	576.7	0.38	13.1
Williamsburg .....	432,460	173	7,202.2	1.67	41.6
York .....	234,774	75	501.5	0.21	6.7
TOTALS.....	11,789,643	5,166	91,668.2	0.78	17.7

TABLE 11—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1944-45 .....	7,554,757	3,552	111,693.8	1.48	31.4
1945-46 .....	7,555,306	2,904	61,203.2	.81	21.1
1946-47 .....	11,655,623	6,601	232,040.2	1.99	35.2
1947-48 .....	11,542,170	3,149	46,959.8	.41	14.9
1948-49 .....	11,789,643	5,166	91,668.2	.78	17.7



TABLE 12—SEEDLING DISTRIBUTION BY COUNTIES, SPECIES AND AMOUNTS—1948-49

COUNTY	Slash	Longleaf	Loblolly	Spruce	Cypress	Total
Abbeville .....	4,000	50,000	436,500	.....	.....	490,500
Aiken .....	1,364,500	38,000	197,500	.....	500	1,600,500
Allendale .....	1,321,000	.....	193,000	.....	.....	1,514,000
Anderson .....	16,000	.....	253,500	.....	.....	269,500
Bamberg .....	108,000	.....	.....	.....	.....	108,000
Barnwell .....	1,818,000	1,000	106,500	.....	.....	1,925,500
Beaufort .....	122,500	.....	37,000	.....	.....	159,500
Berkeley .....	1,449,910	5,000	415,000	380,100	.....	2,250,010
Calhoun .....	254,000	.....	23,000	.....	.....	277,000
Charleston .....	97,000	.....	26,000	5,000	.....	128,000
Cherokee .....	.....	.....	310,000	.....	.....	310,000
Chester .....	11,500	3,000	303,000	.....	.....	317,500
Chesterfield .....	614,500	5,000	86,800	.....	.....	706,300
Clarendon .....	283,400	33,000	11,000	.....	.....	327,400
Colleton .....	561,500	5,000	59,000	.....	500	626,000
Darlington .....	289,000	6,000	85,500	.....	.....	380,500
Dillon .....	98,500	1,000	33,000	.....	.....	132,500
Dorchester .....	308,000	10,000	242,000	8,000	.....	568,000
Edgefield .....	16,000	.....	700,000	2,000	.....	718,000
Fairfield .....	6,500	6,000	601,500	.....	.....	614,000
Florence .....	218,000	1,000	213,500	500	1,000	434,000
Georgetown .....	384,500	.....	137,500	.....	.....	522,000
Greenville .....	10,500	.....	104,000	500	.....	115,000
Greenwood .....	426,500	.....	296,500	.....	.....	723,000
Hampton .....	740,000	.....	330,000	.....	.....	1,070,000
Horry .....	106,000	.....	228,000	.....	.....	334,000
Jasper .....	732,000	.....	195,500	.....	.....	927,500
Kershaw .....	2,516,500	6,000	1,153,500	1,000	1,000	3,678,000
Lancaster .....	53,000	500	215,000	.....	.....	268,500
Laurens .....	7,000	1,000	581,000	.....	.....	589,000
Lee .....	52,000	.....	2,000	.....	.....	54,000
Lexington .....	356,000	91,500	132,500	.....	.....	580,000
Marion .....	216,000	.....	322,000	.....	.....	538,000
Marlboro .....	162,000	.....	99,000	.....	.....	261,000
McCormick .....	.....	1,000	132,000	.....	.....	133,000
Newberry .....	18,000	.....	699,700	.....	.....	717,700
Oconee .....	1,500	2,500	304,500	.....	.....	308,500
Orangeburg .....	922,190	21,000	104,500	.....	500	1,048,190
Pickens .....	12,500	.....	162,000	500	1,000	176,000
Richland .....	346,000	6,250	364,000	6,000	1,500	723,750
Saluda .....	20,000	.....	443,000	.....	.....	463,000
Spartanburg .....	14,250	275	293,700	.....	.....	308,225
Sumter .....	803,500	13,500	194,500	5,500	.....	1,017,000
Union .....	23,000	50,000	1,371,500	.....	.....	1,444,500
Williamsburg .....	85,100	4,100	97,500	.....	.....	186,700
York .....	11,500	1,350	282,650	.....	.....	295,500
State Totals.....	16,981,350	362,975	12,579,350	409,100	6,000	30,338,775
Out-of-State .....	206,000	.....	1,261,000	.....	.....	1,467,000
GRAND TOTAL.....	17,187,350	362,975	13,840,350	409,100	6,000	31,805,775

TABLE 13—SEEDLING DISTRIBUTION—BY LAND CLASSIFICATION—1948-49

LAND OWNERSHIP	Slash	Longleaf	Loblolly	Spruce	Cypress	Total
Farms .....	6,452,500	196,350	3,963,550	11,500	3,500	10,627,400
Other Individuals.....	3,473,500	42,750	818,000	4,500	2,500	4,341,250
Associations and Clubs.....	189,500	12,500	32,000	.....	.....	234,000
Schools .....	390,100	625	424,800	.....	.....	815,525
State Forests.....	1,012,000	5,000	150,000	5,000	.....	1,172,000
Other State Lands.....	793,500	.....	300,500	.....	.....	1,094,000
Cities, Towns and Counties.....	24,250	250	3,500	.....	.....	28,000
Water and Power Co.....	58,000	.....	300,000	.....	.....	358,000
Pulp and Paper Co.....	3,511,000	500	5,084,000	380,100	.....	8,975,600
Lumber Co.....	581,000	.....	264,000	.....	.....	845,000
Mining Co.....	3,000	.....	.....	.....	.....	3,000
Railroad Co.....	5,000	.....	.....	8,000	.....	13,000
Other Industrials.....	438,000	5,000	239,000	.....	.....	682,000
Federal Lands.....	50,000	100,000	1,000,000	.....	.....	1,150,000
State Totals.....	16,981,350	362,975	12,579,350	409,100	6,000	30,338,775
Out-of-State .....	206,000	.....	1,261,000	.....	.....	1,467,000
GRAND TOTALS.....	17,187,350	362,975	13,840,350	409,100	6,000	31,805,775









Boating is popular at Lee State Park.



**STATE OF SOUTH CAROLINA**

**REPORT**

**OF THE**

**STATE COMMISSION OF FORESTRY**

**FOR THE YEAR**

**JULY 1, 1949 TO JUNE 30, 1950**

**CHARLES H. FLORY, State Forester**



**COLUMBIA, S. C.**

**Printed Under the Direction of the  
State Budget and Control Board**

# TABLE OF CONTENTS

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	Page
LETTER OF TRANSMITTAL .....	5
PERSONNEL .....	7
SUMMARY .....	9
FOREST FIRE PROTECTION.....	19
Forest Area Protected.....	21
Forest Fire Protection Organization.....	21
Protection Personnel.....	23
Fire Protection Activities.....	24
Improvements, Maintenance and Equipment.....	29
Equipment .....	35
Forest Fire Summary.....	39
FOREST MANAGEMENT.....	45
Management Assistance .....	46
Reforestation .....	50
Cone Collection .....	51
Forest Survey.....	52
Farm Forestry.....	53
County and State Forests.....	53
Aiken County Forest.....	54
Cassatt State Forest.....	55
Harbison State Forest.....	55
Phelps State Forest .....	55
Manchester State Forest.....	56
Sand Hills State Forest.....	59
PUBLIC RELATIONS.....	65
Cooperative Forest Fire Prevention Campaign.....	65
Forestry Demonstrations .....	66
Conservation Week .....	68
Towersite Improvement Contest.....	69
Motion Pictures.....	70
Vocational Agriculture School Forests.....	71
Resource Use Education.....	73
Talks .....	73
Radio .....	74
Exhibits .....	75
Southern States Public Relations Conference.....	78
Training .....	78
Publications and Posters.....	79
News Releases and Articles.....	80
Boys Forestry Camp.....	82
Sign and Woodworking Shop.....	82
South Carolina Tree Farms System.....	82
STATE PARKS.....	85
Operation and Maintenance.....	87
Cooperative Projects.....	93
Table of Facilities.....	95
Clark Hill.....	96
Park for Dillon County.....	96
Growth of the State Park System.....	97
Vacation Accommodations.....	98
Recommendations .....	99
APPENDIX .....	101



## LETTER OF TRANSMITTAL

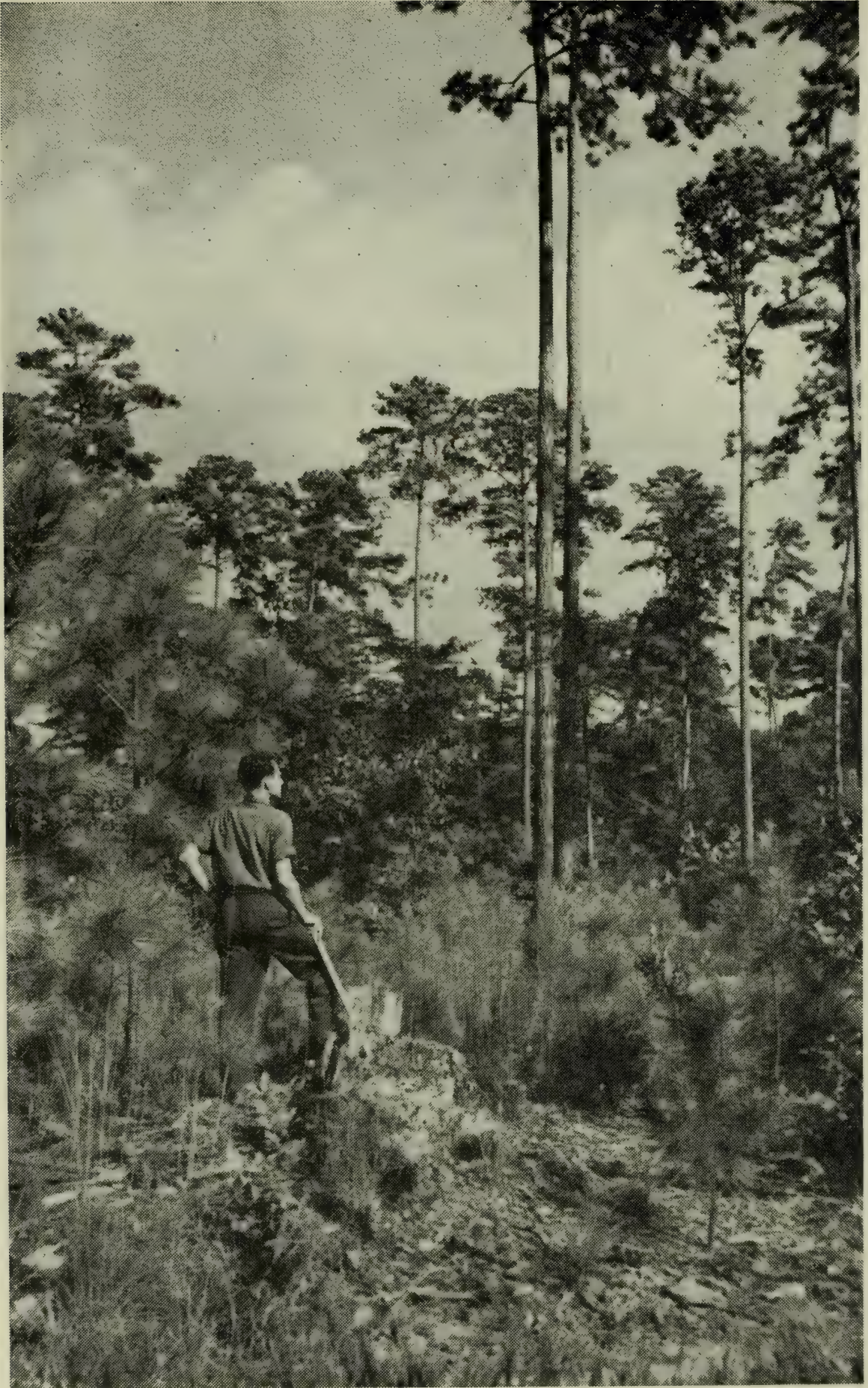
*To Honorable J. Strom Thurmond, Governor, and to the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1949 to June 30, 1950.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
Guy V. Whitener, *Chairman*.





Wise harvesting of timber keeps forests continuously productive.



## THE STATE COMMISSION OF FORESTRY

Guy V. Whitener, Chairman, Newberry, S. C.

Richard G. Coker, Vice-Chairman, Hartsville, S. C.

R. F. Poole, Clemson, S. C.

A. Leland Slade, Jr., Aiken, S. C.

A. B. Taylor, Spartanburg, S. C.

Chas. H. Flory, Secretary and State Forester.

## DIVISION OF FORESTRY

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John R. Tiller, Assistant State Forester, Protection, Columbia, S. C.

John C. Witherspoon, Assistant State Forester, Public Relations, Columbia, S. C.

D. G. Duncan, Administrative Assistant, Columbia, S. C.

E. C. Pickens, Management Assistant, Columbia, S. C.

A. A. Lehocky (1), Management Assistant, Columbia, S. C.

Horace Campbell, Fire Control Assistant, Columbia, S. C.

John M. Shirer, Fire Control Assistant, Columbia, S. C.

John R. McLees, Fire Control Engineer, Columbia, S. C.

J. M. Geddings, Communications Engineer-Telephone, Columbia, S. C.

R. M. Littlejohn, Communications Engineer—Radio, Columbia, S. C.

W. J. Barton, Public Relations Assistant, Columbia, S. C.

Walter T. Ahearn (2), Public Relations Assistant, Columbia, S. C.

Virginia S. Holmes, Head, Personnel & Office Services, Columbia, S. C.

C. H. Nelson, Head, Fiscal & Accounting, Columbia, S. C.

Hugh White, Head, Property & Supply, Columbia, S. C.

Cole L. Page, District Forester, Aiken, S. C.

Nelson L. Peach (3), District Forester, Camden, S. C.

A. E. Kunz (4), Acting District Forester, Florence, S. C.

Howard R. Scott, District Forester, Kingstree, S. C.

E. L. Middleswart (5), District Forester, Newberry, S. C.

Fred N. Mack (6), District Forester, Spartanburg, S. C.

W. L. Hardin, District Forester, Walterboro, S. C.

Randolph B. Lee, Director, Sandhills State Forest, Patrick, S. C.

C. W. Nuite, Director, Manchester State Forest, Wedgefield, S. C.

L. M. Staley, Nurseryman, Wedgefield, S. C.

**DIVISION OF STATE PARKS**

C. West Jacocks, State Park Director, Columbia, S. C.

T. D. Ravenel, Asst. Park Director—Operations, Columbia, S. C.

E. R. Vreeland, Asst. Park Director—Operations, Columbia, S. C.

Albert Schellenberg, Asst. Park Director—Plans, Columbia, S. C.

- 
- (1) Promoted from District Forester, Camden District, to Management Assistant, Columbia Office, on August 1, 1949.
  - (2) Promoted from District Forester, Florence District, to Public Relations Assistant, Columbia Office, on January 16, 1950.
  - (3) Transferred from District Forester, Florence District, to District Forester, Camden District, August 1, 1949.
  - (4) Promoted from Asst. Forester, Florence District, to Acting District Forester, Florence District, January 16, 1950.
  - (5) Transferred from District Forester, Spartanburg District, to District Forester, Newberry District, August 1, 1949.
  - (6) Transferred from District Forester, Newberry District, to District Forester, Spartanburg District, August 1, 1949.



## SUMMARY

The demand for the various services performed by the South Carolina State Commission of Forestry was greater during 1949-50 than ever before.

For the first time annual attendance at the State Parks passed the two million mark.

During the four month period—January 1 to May 1, 1950, forest fire protection forces fought 6,664 fires. This was a greater number than occurred during any one entire year since forest fire protection was extended state-wide.

More private landowners were provided woodland management assistance than ever before.

Nearly twice as many people ordered forest tree seedlings in 1949-50 as in 1948-49.

Educational activities of the Commission, especially with schools, press, radio, and exhibits, were carried on to a greater extent than ever before.

Summary statements of press made during the year within the several branches of the Commission follow:

### **Forest Fire Protection:**

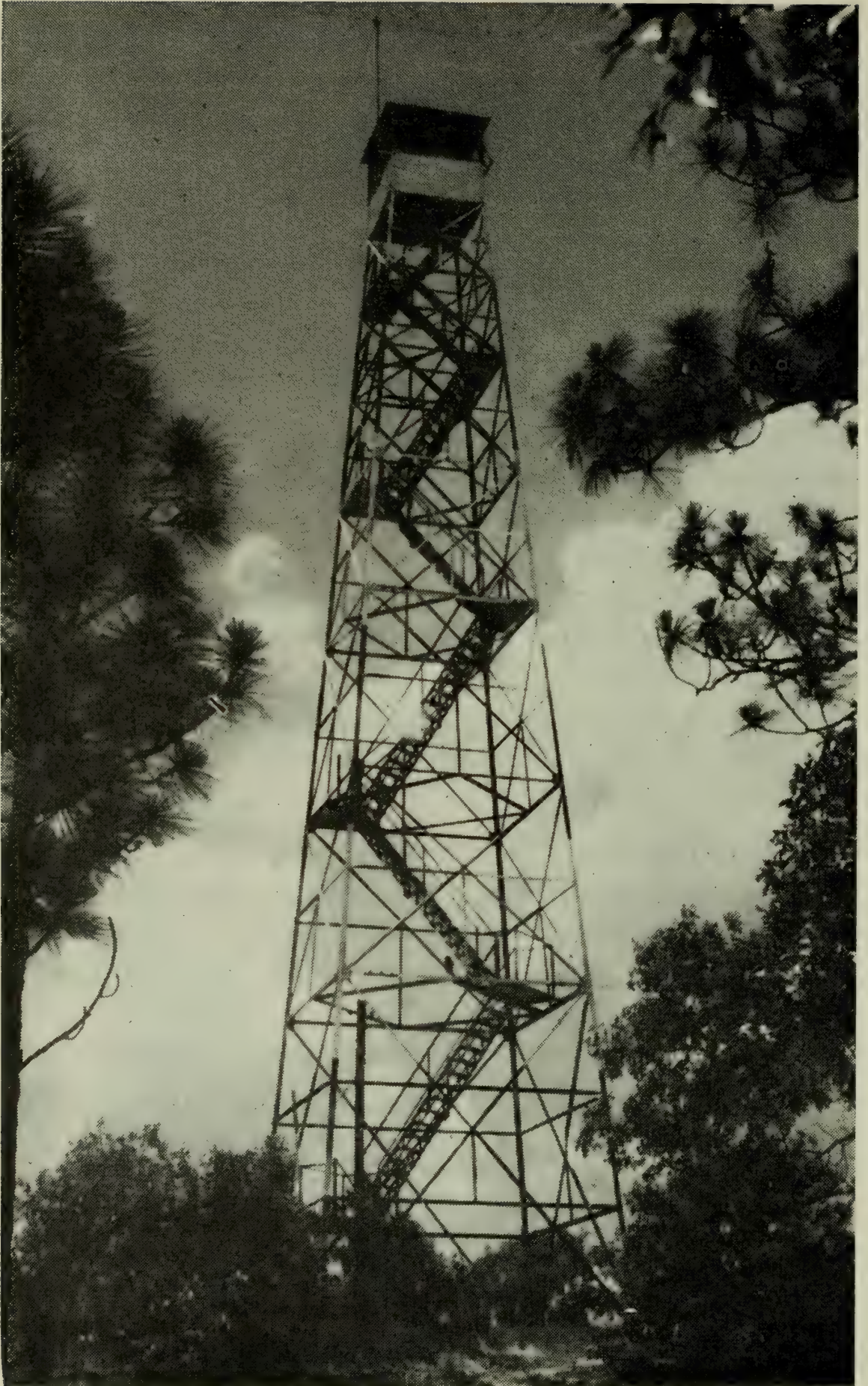
People caused 99% of the 8,424 forest fires that burned nearly  $\frac{1}{4}$  million acres in South Carolina this year.

Probably the most important single factor was the rather widespread belief that woods burning would stop the boll weevil and screw worm. There is no scientific evidence that this is true.

According to the Clemson College Extension Service, 38 of the 40 farmers who have won the State Cotton Contest in the past few years were contacted in 1949-50. Every one of these 38 leading farmers stated positively that burning the woods does not have any effect on boll weevil control.

But as long as people believe that it does, South Carolina will continue to suffer. The average loss of timber due to woods fires equals the harvest of pulpwood in the state. Critical materials are destroyed by fire, further depleting timber in the state when it is also being cut faster than it is being grown.





Lookouts serve as the eyes of forest fire fighters. A complete radio system is needed to connect all towers and fire fighters so that men and equipment may be quickly sent to fires.



Public apathy to the real damage caused by forest fires is probably the key to the whole problem. Most of the fires this year occurred in the Low Country where many of the same tracts burn over year after year. Hardest hit was Orangeburg County with 8.37% of its forest land burned compared with only .05% in Pickens County. Little trees needed to grow a full stand never have a chance. Older trees suffer quality loss. Yet it happens every year.

For the past five years an average of 5,000 fires per year has burned 150,000 acres annually or 1.3% of the protected area. These are illegal fires and are in addition to those started by a landowner and confined to his property.

Even the average annual burn of 1.3% is far too high and is not an acceptable risk for landowners. This year the loss was 2.13% of the protected area (all forest land in South Carolina except that owned by Federal government and a small amount owned by other governmental agencies).

The five year average loss cannot be reduced without intensification of both the prevention and control program, for which additional funds will have to be made available.

To reduce fire occurrence it will require a much more intensive educational program. This will have to be backed up with stronger fire laws.

To reduce area burned it will require more equipment, two-way radio networks covering the state, and more personnel.

Federal funds for this purpose have been reduced for South Carolina as neighboring states qualify for a higher percentage of the total on the basis of state appropriations. The Commission's fire control organization is trying to do the job on 60% of the known basic cost of protection.

The function of the State Commission of Forestry is to help every landowner help himself. The state cannot do the job alone.

### **Forest Management:**

South Carolina is a great timber growing state, with its long growing seasons, soils suitable for growing timber, and adequate rainfall. However, due to inadequate fire protection and poor cutting practices the woodlands of the state are producing only one-third of the amount of timber they are capable of producing.





The forest products industry in South Carolina is the state's second largest industry. Good cutting methods, reforestation, and adequate forest fire protection are needed to furnish the 1600 primary wood using industries with raw material.

Complete protection from wildfire, improvement in cutting practices on all woodlands, and planting forest tree seedlings on areas that nature will not reseed is essential before the woodlands of the state will produce the maximum amount of wood.

The Forestry Commission, through its forest management branch, will assist any landowner in the state with his timber problems. During the year Commission foresters made 880 woodland examinations on 163,334 acres of forest land, and a total of 13,283,940 board feet and 3,385.3 cords was selectively marked for 242 landowners on 8,427 acres of forest land. More individual landowners received woodland examinations and the selective marking service than ever before.

Nearly 35 million trees were grown at the Commission's tree nursery—making this nursery the largest single producer of forest tree seedlings in the country. Trees were furnished to 4,155 landowners in South Carolina. This is almost double the



number of landowners who ordered seedlings in any previous year.

Activities on 5 state forests comprising 129,216 acres included tree planting, release cuttings, sale of forest products, eradication of scrub oaks, and pruning. A number of experiments on planting, thinning, and methods of hardwood control are being carried out on the state forests.

### **Public Relations:**

The purpose of the Commission's public relations program is the education of everyone for wise use of our forest and recreational resources. This means reaching people with information. This involves working with groups of people in order to reach individuals.

Excellent cooperation was had from wire services, newspapers and radio stations. During the worst of the forest fire season, probably more people were informed on that subject than at any other period in the 21-year history of the Commission.

Most of this effort was the reporting of going fires. The State Commission of Forestry believes that the fire situation should be reported to the people.

More work must be directed toward preventing the occurrence of fires.

When 950 forest fires burn in one county in one year in South Carolina something should be done about it.

One of the activities designed to achieve this end as well as other desirable goals in conservation is the Commission's work with schools. Some twenty years ago the Commission began the School Forest program with teachers of vocational agriculture and Future Farmers of America.

During the late summer of 1949, plans were laid for this activity to be expanded to give forestry instruction to all teachers of vocational agriculture in several counties in the Low Country whether they had school forests at their schools or not. A one-day field workshop was planned by the district forester and the district supervisor of vocational agriculture at Walterboro and held in October, 1947. The success of this meeting prompted similar training meetings for regular and veteran teachers, both white and colored, throughout the state in the fall of 1948.



In the fall of 1949 these workshops were repeated for these teachers. This time the emphasis was on proper methods of thinning timber.

Similar workshops were held this year with elementary classroom teachers to enable them to better fit resource use education into their teaching program for boys and girls.

Among some educational leaders a great deal of interest is developing in the idea of camping on school time. This year one group used group camp facilities at Kings Mountain State Park to give 6th grade boys and girls out-of-door training in conservation. The use of these facilities could well be expanded.

Other activities of the public relations branch include using the usual media in educating for conservation. In cooperation with the State Highway Department 480,000 license plate inserts carrying an illustrated fire prevention message were placed for use in the fall distribution of plates. Exhibits were placed in 45 county fairs, state fair and special expositions. An estimated



School forests are used as outdoor classrooms for teaching forestry to vocational agriculture students, veterans' farm classes and other groups.



3/4 million people saw the exhibits. This compares with 29 placements before 1/2 million people last year.

Fifteen sets of the "Jelly Elliott and his Three Knotheads" radio transcription series of 13 programs of hillbilly music carried forest fire prevention messages to the forks of the creek.

### State Parks:

South Carolina's State Parks are enjoying an increasing popularity in serving as outdoor playgrounds for the people of the state. During the year a new record for attendance was set when more than 2 million visitors used the state parks.

There is something to interest each member of the family at all state parks. People may picnic, swim, fish, boat, play games, hike, or just relax and rest. Parents feel free to let their children swim under the watchful eyes of trained Red Cross lifeguards.

Many groups use state parks as outdoor classrooms for teaching conservation, nature, geology and history. These undisturbed areas offer excellent teaching material on many subjects.



Nearly 3/4 of a million picnickers enjoyed state park facilities last year.



Croft State Park in Spartanburg County and Santee State Park in Orangeburg County completed their first full year of operation in the state park system.

A new facility, a 640-foot fishing pier, was constructed at Myrtle Beach State Park. A bathhouse was added at Rivers Bridge, and a recreation building was started at Lee State Park. Maintenance and improvement work was accomplished at all state parks.

The 79 state park vacation cabins were reserved for the entire summer season. In addition, the off-season use of these facilities is increasing. The seven group camps are being used by Boy and Girl Scouts, YWCA, YMCA, church and school groups.

Every year the demands of our people for state park facilities increases. Facilities should be expanded in the existing state parks.

Additional parks are needed where population pressure shows the need. At present, these are the Clark Hill, Pee Dee and Charleston areas.

Additional areas should be developed to meet the needs of our colored population, and facilities in existing negro parks should be expanded.

### **Recommendations:**

The big job of the Commission is to help people grow more timber. Nearly all of the timber land in South Carolina is owned by farmers, other individuals, or companies. To grow more timber, it must be protected from the 5,000 wild fires that burn people's woodlands in the state every year.

These fires are caused by people. People, therefore, need to learn what real values are destroyed. The Commission's educational program of fire prevention should be intensified.

Forest fire laws should be strengthened to prevent indiscriminate setting of fires, especially during critical periods. More severe penalties should be provided for setting fire to lands of others.

Funds currently available to the Commission for fire protection are only 60% of the cost of adequate protection. During a normal year more than twice as much forest land burns as would under adequate protection. This year the forest fire condition reached "blow-up" proportions, and was beyond the capability of the existing organization to handle.



"Adequate protection" is holding the loss to  $\frac{1}{2}$  of 1% of the protected area. The average for South Carolina is 1.3%. But this year the loss was over 2%!

Protection personnel must have equipment and tools to do a reasonable job of assisting landowners. The expansion of present two-way radio facilities is a critical need for efficient operation.

Salaries of county fire fighting personnel must be raised for effective work. Living costs continue to rise and they have had no raise in two years.

In addition to fire protection, forest landowners need information and assistance to grow the timber our land is capable of supporting. Technical advice on-the-ground is a major service of the Commission.

Between 1936 and 1947 standing timber supplies dropped 10%, cull trees increased from 1 out of 10 to 1 out of 5. The average tree today cuts out 15% less usable wood in 1947 than in 1936. Only by the prevention of wild fire and the widespread adoption of good cutting and other practices can this trend be reversed. The Commission's program of education needs strengthening to accomplish this end. It is questionable if future industrial expansion should be undertaken until timber growth at least equals the harvest.

More than  $1\frac{1}{2}$  million acres of idle or unproductive land should be planted to trees. The planting job should be stepped up if this land is to be productive within a reasonable length of time.

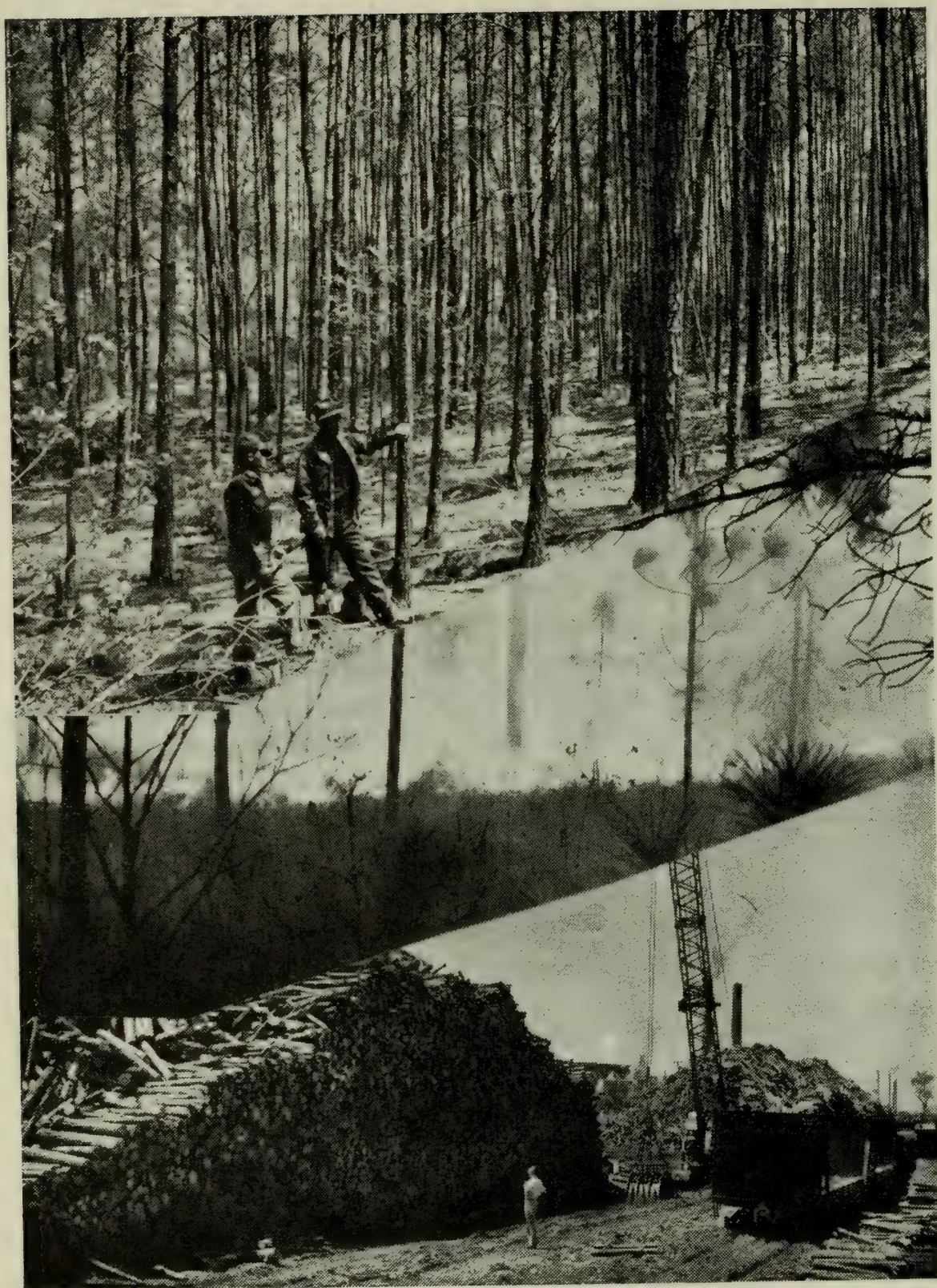
Educational materials and services of the Commission should be strengthened generally to supply the increased demand by school groups, conservation committees, and others.

South Carolina's system of 19 state parks attracted over 2 million people this year. In addition to the wholesome family-type recreational facilities, state parks offer opportunity for educational activities. One school group of 87 sixth grade pupils with their teachers and supervisors studied on school time for a week at Kings Mountain State Park. Under a state system, such developments promise real progress in conservation education.

It is recommended that the maintenance program in the parks be strengthened so that existing facilities may be economically maintained to serve the people. Further development of facilities in existing parks is recommended to serve the needs of the increasing number of people using the state parks.

It is also recommended that additional areas be developed to meet the needs of colored people.





Each year in South Carolina forest fires destroy as much timber as the pulp and paper industry harvests in the state. The first step in a program of forest conservation is to establish adequate fire protection for all the forest lands in the state.



## FOREST FIRE PROTECTION

Adequate fire protection for all woodland areas of the state was a part of the overall forestry plan conceived in 1928 by the Commission of Forestry for ultimate achievement. The protection area increased from a few thousand acres to whole counties and finally, in 1945, the entire state. While statewide protection was authorized by the 1945 session of the South Carolina General Assembly, and while much has been accomplished prior to and since that date in organizing such a protection system, the Commission still is a long way from attaining *adequate* protection for our woodlands.

The *overall objective* of the forest fire control program is *protection to all woodlands sufficient to make ownership of forest property for timber production a reasonable and acceptable economic risk*. Holding the average annual burn to *one-half of one per cent* would generally accomplish this objective. Over the past five years in South Carolina, *there has occurred an average of 5,000 fires per year which have burned 150,000 acres, or 1.3% of the protected area*. Such an annual burn does not constitute an acceptable risk to either forest landowners or industry.

The annual cut of forest products in the state annually yields \$22,075,000, in payment for timber on the stump. The capital value of the major forest industries plus the annual payrolls for processing the raw materials through these major industries amounts to \$2,230,700,000. In addition, the stumpage value of the state's standing timber is some \$481,668,000. Thus, the total forest value protected is \$2,734,443,000. This does not include recreational values such as hunting and fishing, tourist values, soil and real estate values, value of water resources protected, the welfare of the 100,000 persons who wholly or partially depend upon our woodlands for a livelihood; nor does it include the value of the entire crop of trees under five inches in diameter which constitute the forest products of tomorrow and which are the most susceptible to destruction by wild fires. It should be pointed out, too, that our woodlands are now producing only one-third to one-half the wood they are capable of producing. Thus, our production of wood could be at least doubled to insure continuous raw materials to existing and new forest industries, resulting in vastly increased values to the landowners, the communities and to the state.

The state's forest fire protection program has not yet offered adequate insurance of forest values either to landowners or to industry. The annual burn has been far too great. Some large fires have burned entire ownerships, which is not at all conducive to large scale tree planting, improvement cutting and other forest management practices.

Forest fire protection is not adequate as financing has not been adequate. Since fire control work began, the overall annual cost per acre protected has risen from 2.8 cents in 1929 to 7.3 cents in 1949-50. This increase has been due to rising prices and wages and to some intensification of fire prevention, presuppression and suppression activities. In 1945, at which time the state undertook a statewide protection program, it was learned from intensive studies that the cost of *adequate* protection would be \$1,023,000, or 9.3 cents per acre per year. The 1949-50 fire control budget totalled \$834,200, or 7.3 cents per acre. *Based on recent studies, and due to increasing costs of materials, labor and equipment, the present cost to perform an adequate protection job is \$1,352,800, or 12.0 cents per acre.* Only through adequate financing can South Carolina's forest fire control program become efficient and adequate protection to its tremendous forest values be wholly assured.

Among the several immediate needs of the Commission's Branch of Forest Fire Control are: (1) Intensification of the educational program, placing greater emphasis on forest values; (2) Strengthen the fire laws to prevent indiscriminate setting of fires, especially during critical periods, and to provide more severe penalties for setting fire to lands of others; (3) Secure use of equipment of other state agencies to assist in combatting fires during high occurrence and critical periods; and (4) Intensify fire control organization and facilities with some additional fire fighting personnel, more heavy fire equipment and hand tools, complete two-way radio coverage, and adequate provisions to maintain equipment and improvements.

Despite its many needs with which to do a more efficient protection job, the forest fire control organization continued to direct its activities toward exclusion of wild fires from South Carolina's woodlands. The following pages describe in some detail the Commission's fire protection organization and its activities and accomplishments during the fiscal year 1949-50.



## FOREST AREA PROTECTION

A total of 11,300,008 acres of private forest lands received organized forest fire protection during the year. This total includes 154,882 acres of forest lands in State Parks and State Forests, the remaining area of woodland being entirely privately owned.

The area of forest land under statewide fire protection does not include 584,492 acres within the National Forest boundaries and protected by the U. S. Forest Service. In addition, there are some 58,100 acres of woodland under the jurisdiction of various other federal agencies. This area is protected by these individual federal agencies and is not included in the statewide fire protection statistics.

## FOREST FIRE PROTECTION ORGANIZATION

All forest fire protection work as performed by the Commission is conducted on a cooperative basis with the landowners of the state. The Fire Control organization is designed to furnish assistance in the form of trained leadership and equipment in preventing forest fires and suppressing those fires which occur. Nevertheless, the responsibility of prevention and control of forest fires in privately owned woodlands rests with the landowner.

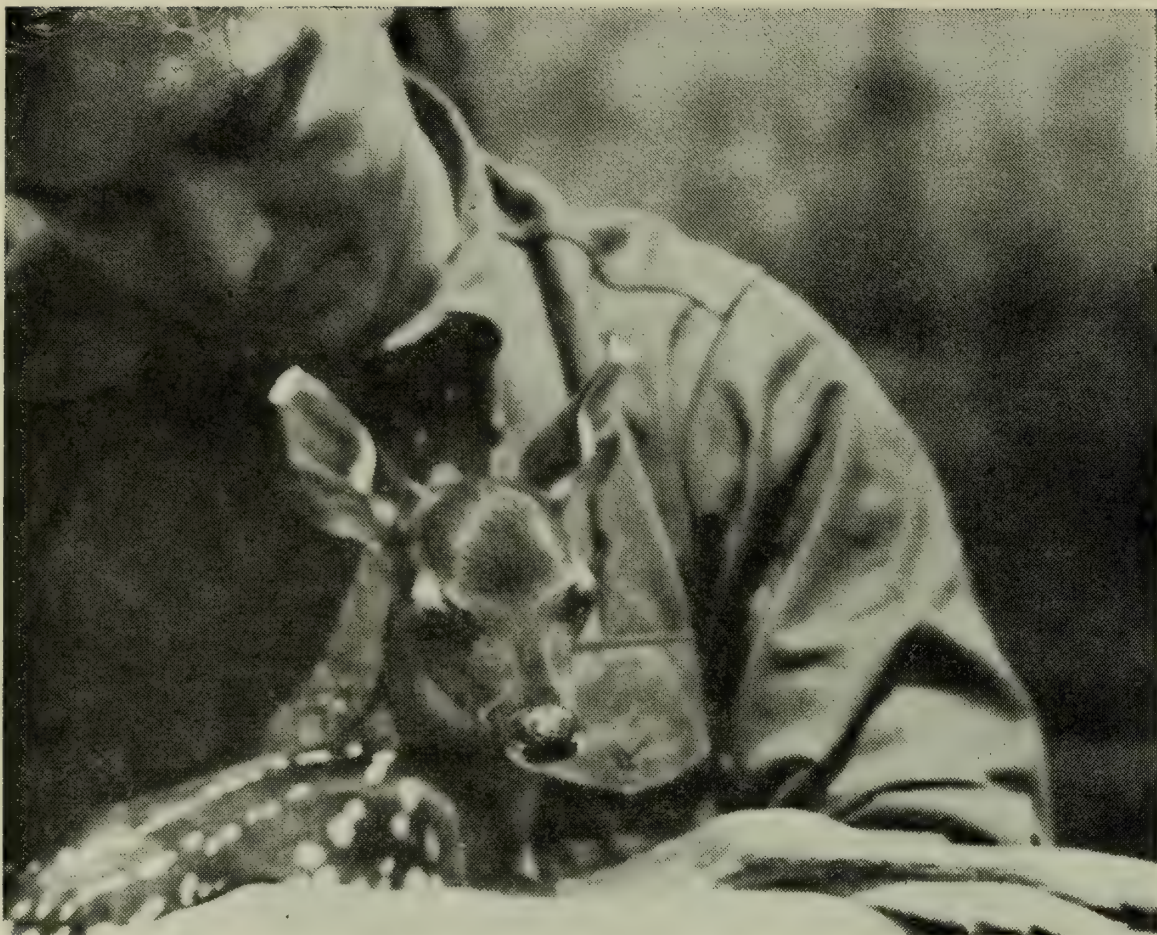
For administrative purposes the state is divided into seven forest districts. All forest work in each district, including fire protection, is under the direct supervision of the District Forester.

### County Units:

All phases of protection work in each of the county units are supervised by individual unit rangers under the direction of the District Forester. All fire protection activities within each unit are carried out by the organization personnel which consists of a ranger, wardens, towermen, tractor operators, warden flexible crews, tower flexible crews and volunteer crews.

The wardens, who are directly responsible to the unit ranger, supervise and carry out all phases of protection work within their respective district. The duties of the towermen are chiefly to detect, locate and report all forest fires occurring within their visual range. In addition to maintaining their towersites in a neat and orderly manner, the towermen also do fire prevention





This fawn, separated from its mother during a fire on Wadmalaw Island, was rescued by fire fighters.

work through their contacts with persons visiting the towers and assist the ranger and wardens with various maintenance jobs. The tractor operators are assigned to the suppression tractors that are dispatched to forest fires which the unit fire-fighting personnel cannot efficiently suppress otherwise. Although the primary job of the tractor operators is to operate the mechanized plowing equipment and assist the suppression forces, they also assist the ranger and wardens with communication line and tower-site maintenance activities. From time to time during extremely hazardous fire weather, it is necessary to employ tower and warden flexible crews to assist the regular organization with the suppression of forest fires. These crews are employed when, due to high fire danger periods, a larger organization is necessary. The ranger and wardens also organize a number of volunteer fire crews in each community of the county. The men who comprise these crews assist in the prevention and suppression of fires primarily in their locality. These volunteers are equipped and



trained in forest fire suppression tactics and assist materially in handling conditions in the individual neighborhoods.

### **State Forests and Parks:**

All State Forests and Parks receive cooperative assistance in fire protection activities through the local county unit organization. These state administered areas are treated in the same manner as other private lands throughout the state in that the State Forests and Parks personnel are directly responsible for the prevention and suppression of all fires which occur on these areas. The combined forest acreage of all State Forests and Parks is 154,882 acres.

### **National Forest Protection:**

The two National Forests in South Carolina, the Francis Marion located in the lower Coastal Plains and the Sumter National Forest located in the Piedmont, are provided fire protection by their own forces and equipment. All activities, including fire protection, on the 584,492 acres of National Forest land is supervised by the U. S. Forest Service.

### **Cooperative Agreements:**

Cooperative agreements have been drawn up and put into effect by the U. S. Forest Service and the State Commission of Forestry, thereby greatly facilitating the coordination of all fire protection activities of these two agencies. These agreements place responsibility for protection of the forest lands on the agency having the greater forest protection area in the immediate vicinity of the property in question. Definite protection boundaries of each agency have been established.

## **PROTECTION PERSONNEL**

The number of persons employed in connection with fire protection work during the year did not vary materially with the number employed during the previous year. There was, however, in some counties considerable turnover in the various positions below the ranger level. This continued loss of trained personnel was mainly attributed to the Commission's inability to provide salaries comparable with salaries for other similar jobs. In spite of the many changes, most county units were kept com-

pletely organized throughout the year, replacements being made shortly after vacancies occurred.

The total of 731 persons were employed on either a full time or part time basis for fire prevention and suppression work. This number includes 46 rangers, 132 wardens, 135 towermen, 37 tractor operators, and 380 individuals employed in retainer and flexible crews. In addition to the regular organization, a total of 2,813 persons were organized in volunteer fire crews. Also, some 12,138 other persons voluntarily assisted the regular unit organization in forest fire suppression in their respective communities. In all, 15,682 persons were engaged in one way or another with fire protection work with the Commission of Forestry during the year. This represents an increase of 51 per cent over the number of persons assisting in prevention and suppression activities during the previous fiscal year. This increase may be attributed largely to the greater number of landowners and volunteers within the state who are becoming more fire conscious each year and cooperate with the various unit organizational forces.

At the peak of the fire season, there was one man available for suppression work for each 50,000 acres of woods. Thus, an insufficient force was available to the Commission with which to adequately and efficiently handle the fire situation.

## FIRE PROTECTION ACTIVITIES

### **Training:**

Inasmuch as the fire protection activities conducted by the Fire Control organization are varied and cover many phases of the work, an intensive training program was initiated to thoroughly familiarize all personnel with the entire protection program. In addition to the regular scheduled training meetings, in-place training was given to numbers of the various organizations in each county. The trainees responded exceptionally well to the training given them, thereby greatly increasing the efficiency in fire protection work, savings in time, and a reduction in the acreage losses.

A training meeting for District Office personnel and County Unit Rangers was held in August at Myrtle Beach. This was followed by District training meetings in each of the Districts for unit rangers, wardens, towermen and tractor operators.





Manpower and equipment were strained to the limit last year to cope with the worst fire season in the history of the Commission of Forestry.

In November a training meeting was held at Sumter for all persons operating cletrac tractors throughout the state. The purpose of this meeting was to familiarize all operators and supervisory personnel with the operation of this relatively new piece of equipment. A state training meeting was held in November for all of the District Rangers.

A greatly increased number of small group community meetings were held in numerous communities in the state. In every



instance where this type meeting was held with the landowners, forest fire occurrence in that community was greatly minimized. Also, this type meeting gave the organization a better chance to work directly with the landowners on their specific protection problems.

In all, a total of 348 meetings were held in the state where training and instruction in forest fire protection work was given. All supervisory personnel, including the unit rangers, participated in these meetings as instructors.

### **Inspection:**

Detailed inspections of county unit organization and operation were made both by personnel of the District and Columbia offices. The purpose of unit inspection is to determine the discrepancies of the entire unit protection program in order that a more effective training program may be initiated and carried out, thereby bringing the organization up to prescribed standards and greatly increasing the efficiency of the various activities.

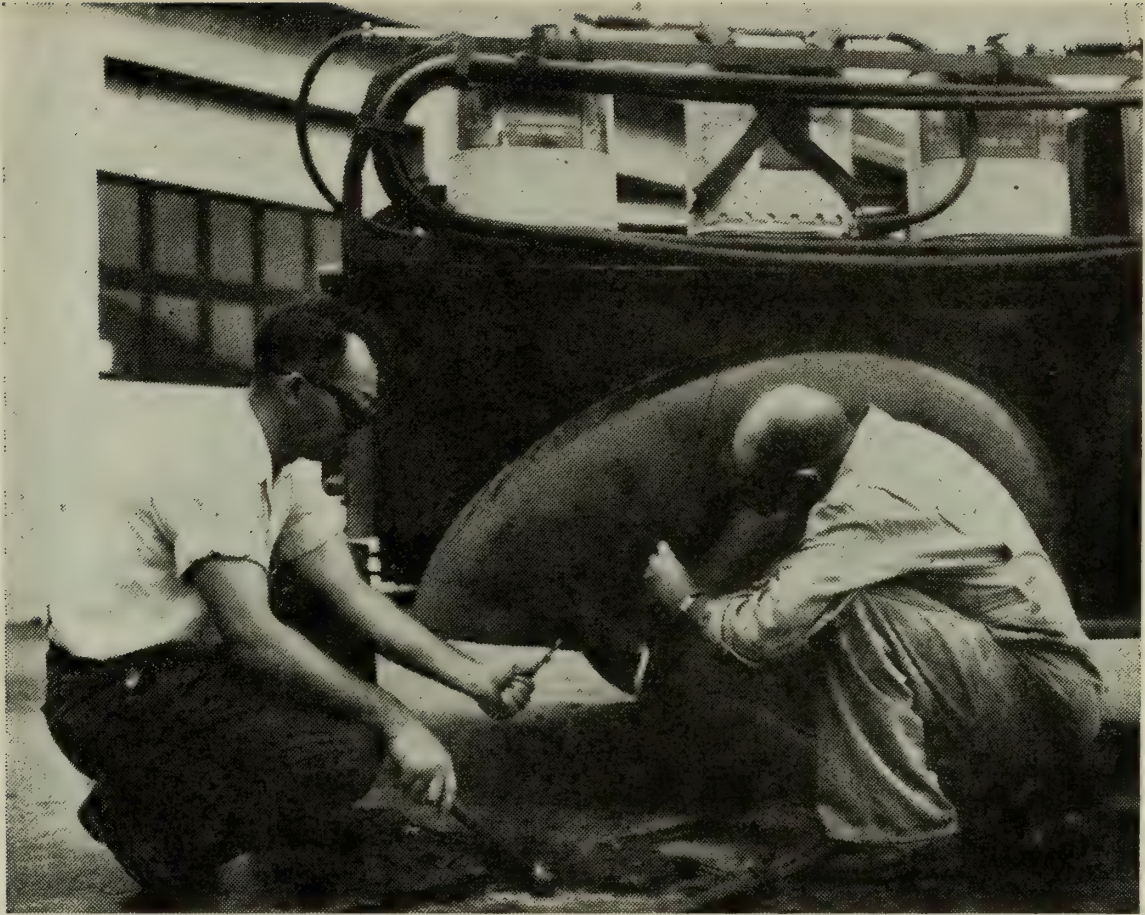
A report of each inspection is prepared in detail with recommendations and is then transmitted to the field for guidance in correcting deficiencies noted. In addition to the regular District inspection of county units, a number of inspections were made by Columbia office personnel.

Regular inspections are made of all motorized equipment by traveling mechanics to insure that this equipment is kept in good operating condition and ready for immediate use in case of fire call.

### **Fire Plans:**

Fire plans have been prepared and put into use in all of the County units, State Forests and State Parks. These plans set forth standard and specific procedures for the control and operation of each unit so as to provide an efficient organization for the control of forest fires. These plans are used by all Fire Control personnel as a ready reference in carrying out any phase of the fire control program. Without doubt, these fire plans have added immeasurably to the efficiency of fire prevention and control work by the statewide organization.





**Traveling Mechanics regularly inspect and repair motorized equipment to assure readiness for fire calls.**

### **Fire Protection Job Descriptions and Qualifications:**

During the year job descriptions and minimum qualifications for the various fire protection positions of the Commission of Forestry were distributed to all personnel concerned and copies furnished to members of the various County Forestry Boards. The job descriptions clearly outline the duties and responsibilities of all regular personnel and, in addition, establishes a set of standards which insures the employment of the highest qualified persons available for the individual positions. The use of these personnel standards will also assist in maintaining continued personnel efficiency.

### **Efficiency Rating System:**

An efficiency rating system for all personnel was initiated and carried out during the latter half of the fiscal year. This system serves as a definite basis for evaluating the capabilities and efficiency of all employees, as well as affording a continuous



means for measuring individual progress from year to year. After furnishing employees information relative to their efficiency classification, they are advised of major inefficiencies and action which can be initiated to show more improvement and progress. The efficiency rating system is also used as a basis for determining various types of training which should be scheduled.

### **Law Enforcement:**

Efforts were directed toward a more intensive law enforcement program for all counties during the year. All illegal fires were carefully investigated by county units and district personnel in an effort to determine the responsibility for the fire. Where sufficient evidence is secured, enforcement of the State Fire Laws is carried out. Although considerable work was done in this activity, more enforcement of State Forest Fire Laws is needed. Continued cooperation of local magistrates is essential to a successful law enforcement program. Records for the fiscal year show that there were 567 persons prosecuted for violation of the various State Fire Laws. Of this number, 523 were convicted. Florence District had the best law enforcement record, with 130 prosecutions and 119 convictions. Horry County led the state with 56 prosecutions and 54 convictions. However, based on the number of fires occurring in the District, Camden District had the best law enforcement average consisting of one prosecution for each seven fires. Also, on this basis, Lee County averaged one prosecution for each two fires. Other county units maintaining a high average were Chester, Chesterfield, Cherokee, Edgefield, Lancaster, Kershaw and Newberry.

### **Burning Permit Law:**

Prior to this fiscal year, only Aiken, Orangeburg and Greenville Counties had in effect a law which required that permits be secured by persons who planned to burn brush, fields and ditch banks adjacent to woodland areas between the dates of October 15th and May 15th of each year. However, during the last session of the General Assembly the county delegations of Georgetown and Horry Counties also passed the burning permit law for their units. In all counties which have this particular law, permits are issued by the county unit organization and certain other designated persons with instructions regarding safety when



burning. The unit organization may refuse to issue a permit to burn if forest fire hazard indicates that such action should be taken. In addition, in all counties except Greenville, permits may be cancelled in the event weather conditions are such as to make burning hazardous.

A total of 6,127 permits were issued in Greenville, Orangeburg and Aiken Counties during the year. Of this total, only eight of the fires were allowed to burn areas not intended to be burned by the landowner. Sixty-four persons were prosecuted in the three counties resulting from violation of the Burning Permit Law. During the years these burning permit laws have been in effect a more careful attitude has been maintained by the persons who conduct annual burnings for various purposes and more thought has been devoted toward the safe use of fire in the open.

During the 1950 session of the General Assembly a Statewide Burning Permit Bill was introduced but was not enacted.

It is believed that a more widespread application of this type burning permit law is needed in the state.

#### **Southern States Fire Control Conference:**

The annual Southern States Fire Control Conference was held at Broken Bow and Lake Murray State Parks in Oklahoma immediately after the close of the spring fire season. In addition to the Southern State Fire Chiefs and their Assistants, the meeting was also attended by the various State Foresters, representatives of the U. S. Forest Service and various private equipment concerns. All discussions were devoted toward the better coordination of activities and use of equipment, improvements, etc., among the Southern states. Much time was also devoted to coordination of activities of the states with those of the U. S. Forest Service.

### **IMPROVEMENTS, MAINTENANCE AND EQUIPMENT**

The statewide fire protection plan projected in 1944-45 called for the construction of complete standardized structural facilities at all new tower sites. This work has not been completed. There has been no allotment of funds for this purpose since 1947.

**Lookout Towers:**

Two new steel towers were erected during the fiscal year. Both towers were constructed from materials already on hand from war surplus. Regular employed personnel were used as labor on these jobs. One of the new towers is sixty feet high and is located at Camp Croft in Spartanburg County. The other is a one hundred foot steel tower and was erected near Pineville in Berkeley County.

Of the 157 lookout towers located in South Carolina, 133 are owned and operated by the Commission. Twenty-one are owned and operated by the United States Forest Service and are located on National Forest areas. There are three towers that are privately-owned but are operated by the Commission.

**Tower Unit Buildings:**

A standardized tower unit consists of a lookout tower, dwelling, water well, barn and latrine. There remains to be constructed on these new tower sites, under the expanded program of the statewide Forest Fire Protection Act of 1945, 23 dwellings, 26 wells and 39 barns and chickenhouses. The work of maintaining the 133 towersites has been necessarily confined to such things as keeping the wells in operation, maintenance of sanitary facilities and other work absolutely essential to the operation of the tower. It was necessary to leave off such work as painting, re-roofing, re-screening and general repair work necessary to the proper maintenance of the buildings due to lack of funds which could be devoted to this activity. Based on 2.5 per cent of the capital value of these units, proper maintenance would require an annual expenditure of some \$25,000. For several years, the Commission has been able to budget only one-third this amount for this purpose.

It is estimated that approximately \$35,000.00 would be needed to bring the 133 towersites up to the minimum standards of the Commission.

**Telephone Lines:**

Marked improvement was made in the Commission's telephone communication system. Some old lines were salvaged and new communication facilities installed. Through the use of im-



proved methods and devices for detecting telephone trouble and continuous maintenance operations by District and Unit personnel, all lines were kept in good working order throughout fire season and very few handicaps were noted due to communication failures. Approximately 11 miles of new telephone lines were constructed to connect new fire control personnel with the Ranger's office and the fire towers within the various units. Some 34 miles of telephone lines were salvaged, 31 miles relocated and 4 miles were attached to commercial telephone and telegraph poles. In addition, 28 fire detection towers and 26 tower dwellings were re-wired, 18 telephone instruments were replaced, 34 new telephones, and three railroad crossings installed, and 1,558 miles of right-of-way were brushed out. All of these improvements were carried out by District and County Unit personnel. In addition to the improvements work accomplished, the usual maintenance repair work and trouble shooting necessary to keep the lines in good operating condition was done in all counties.

Even though telephone lines allow for good communication between the detection tower and the fire control organization prior to fire occurrence, the organization has no communication with fire towers or other sources of additional manpower and equipment after a fire occurs. Increased efficiency in forest fire control as concerns the communications system can only be secured through conversion from telephone communications to two-way radio. During the last session of the General Assembly, the Commission was authorized to sell these telephone lines to private companies and other interested parties and receipts from these sales to be used for purchasing and installing radio units. Negotiations with several individuals have already been initiated, and it is hoped that in due time the Commission will be able to replace a portion of the telephone communications system with a much more effective radio system.

### **Radio:**

Activity in radio communications during the fiscal year 1949-50 was limited primarily to routine maintenance of equipment and to making frequency, power, and modulation checks on all transmitters. The modulation check is a new measurement required by the Federal Communications Commission and was de-



layed until June because of the unavailability of adequate test equipment.

A series of comprehensive tests were made during March and April in the use of a Handie-Talkie radio for communication between an aircraft patrol and ground installation. These tests were very satisfactory. Results of these tests are given in a report, "The Experimental Use of Aircraft in Forest Fire Protection", prepared by the District Forester of Camden.



The Civil Air Patrol cooperated with the Commission in the experimental use of aircraft in locating and reporting forest fires.

It has become increasingly evident that in those districts using radio, a quicker means of communication is needed in district offices to coordinate activities among county units. In January, a purchase order was issued for five Motorola 50-watt fixed stations at a considerable reduction over the regular cost. This was a new equipment order which had been cancelled by a private company. Installation of District Office radio units is held up pending applications for licenses.



During the last fiscal year, the occurrence of bad fires in many areas of the state indicated the need for better communication facilities in these areas. Therefore, a two-way 60-watt radio was installed in Ruby Tower, Chesterfield County, and also the county ranger's truck was equipped. A 50-watt unit was also purchased for Barnwell Tower, and a mobile unit for the ranger in Barnwell County. The ranger's unit has already been installed, and the tower unit is ready for installation.

Additional communication will be afforded Sand Hills Forest in Chesterfield County by the addition of one 2-way mobile unit which has been ordered.

At the end of the year, the Commission was operating 28 base stations and 27 mobile units.

Private industry has shown a continued interest in radio as was indicated by the installation of two new units this year, making a total of 20 units in operation. Orders received from cooperators indicate increased interest in radio expansion among industries and other large landowners during the next year.

The overall plans for radio appear somewhat brighter with the inauguration of a plan, effective July 1, 1950, to sell telephone lines owned by the Commission and to convert the receipts from such sales into two-way radio equipment.

### **Firebreaks:**

Due to budget limitations, no firebreaks were constructed with Forestry Commission equipment during the year. The five fire-break units, consisting of tractor and plow, were used entirely for fire suppression activities in the Coastal Plains area of the state. Even though no firebreaks were constructed with state owned equipment, a considerable number of pulp and paper companies, lumber concerns and large landowners, operating their own equipment, plowed a total of approximately 6,012 miles of firebreaks.

During the year Horry County purchased their own firebreak outfit through a county appropriation and provided a plowing service to landowners within the county. This unit was operated under the jurisdiction of the County Forestry Board and supervised by the Unit Ranger and District Forester. A total of 466.9 miles of pre-suppression breaks were plowed for 125 land-

owners. This unit was also used for fire suppression, plowing some 280 miles for 108 landowners.

### **Fire Danger Measurement Stations:**

The 43 fire danger measurement stations now located throughout the state afforded accurate fire danger predictions and greatly increased the operational efficiency of the various Unit organizations in fire suppression and activities.

By correlating such factors as wind velocity, number of days since last rain, fuel moisture content, condition of the vegetation and season of the year, it is possible to arrive at a present and expected class of forest fire danger. Readings are taken by the observer at these stations four times daily during the fall, spring and winter months. The class fire day derived from the readings is immediately radioed or called to the Ranger and other Unit personnel. The dissemination of this information enables the Fire Control organization to determine forthcoming high fire hazard conditions, alert all personnel, place extra crews on duty and prepare for any emergency which may arise.

It was largely through data gathered at these stations that the fire control organization was able to recognize the build-up of a dangerous fire condition during the fire season and prepare itself, with the manpower and equipment available to it, to cope with a difficult fire situation.

### **ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS**

(Based on Replacement Value)

Items	Value
133 Lookout Tower Units .....	\$1,411,730
1,177 Miles of Truck Trails .....	2,942,503
2,348 Miles of Telephone Lines .....	718,470
60 Radio Installations .....	51,554
43 Fire Danger Measurement Stations .....	3,000
<b>TOTAL</b> .....	<b>\$5,127,257</b>



## EQUIPMENT

The following replacement automotive equipment was purchased during the fiscal year:

Three-quarter ton pickup trucks—3

One and one-half ton longwheel base trucks—4

Light crawler tractors—5

This was a very small part of the new equipment actually needed for replacements of worn out trucks and tractors.

As the new trucks were received, they were sent to the Central Repair Shop at Sumter where booster pumps and tanks, as well as tool racks were installed.

More than sixty per cent of the automotive and tractor equipment owned by the Commission has gone through at least four fire seasons.

The Fire Control equipment, trucks, tractors and plows, were subjected to one of the worst fire seasons in the history of the Commission. One heavy crawler tractor and plow was seriously damaged by fire this season and one light tractor and plow was damaged in the same manner while plowing on a going fire.



One light tractor with plow can do the work of 20 men in fighting a forest fire.



During the past several years, the Commission has been only able to annually replace approximately seven per cent of its fire control trucks. Due to the terrific hard use to which they must be put in forest fire suppression, they should be replaced every three years. Thus, the Commission should, but has not been able, to replace one-third of the fire trucks annually at a cost of approximately \$37,500. Within another year, if it is to operate at all satisfactorily and efficiently, the Commission must replace nearly half of its fire control truck fleet.

#### INVENTORY FIRE TOOLS & EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1950

Items	Value
3,165 Backpack pumps .....	\$ 37,980.00
6,925 Fire Rakes .....	12,465.00
3,290 Fire Swatters .....	8,225.00
5 Heavy Crawler Tractors .....	27,500.00
6 Light Crawler Tractors .....	13,200.00
24 Wheel type Tractors .....	37,200.00
10 H. D. Fire Plows .....	7,200.00
2 3/4 Ton Jeeps w/plows .....	4,700.00
3 3/4 Ton Jeeps w/pumps .....	7,050.00
2 1/4 Ton Jeeps w/plows .....	4,200.00
47 Ranger Pickup trucks w/pumps .....	86,630.00
32 LWB Trucks .....	73,600.00
2 Pickup Trucks .....	2,700.00
5 Truck Tractors .....	12,500.00
6 Equipment Transports .....	13,800.00
1 28 ft. Transport Trailer .....	2,000.00
5 Sedan Delivery Trucks .....	7,000.00
12 Light Equipment Trailers .....	1,650.00
TOTAL .....	\$359,600.00

#### Equipment Maintenance Shop:

A central repair shop is operated at Sumter by the Branch of Forest Fire Control. The shop is operated primarily to handle specialized repairs such as booster pumps and tanks, special tool racks, and for the overhaul of heavy equipment.



The shop serves also as a headquarters for three Traveling mechanics who make frequent inspections of all of the fire control branch's motorized and other equipment. These mechanics, equipped with testing equipment, hand tools and portable welders, make intensive inspections in the field and where possible correct any deficiencies found. The traveling mechanics made a total of 225 miscellaneous repairs during 340 field inspections. The cost, if done by a commercial concern, would have been \$3,247.00. The actual cost was \$1,294.05, thereby saving \$1,952.95.

The balance of the work is sent to local commercial shops or if the cost involved will justify the expense of transportation, the equipment is sent to the central shop at Sumter.

A total of 168 repair jobs was handled at the Sumter shop during the year. The commercial labor value of the work would have been \$3,200.00. The actual cost was \$1,279.55, thus another saving of \$1,920.45.

Some of these jobs are listed as follows:

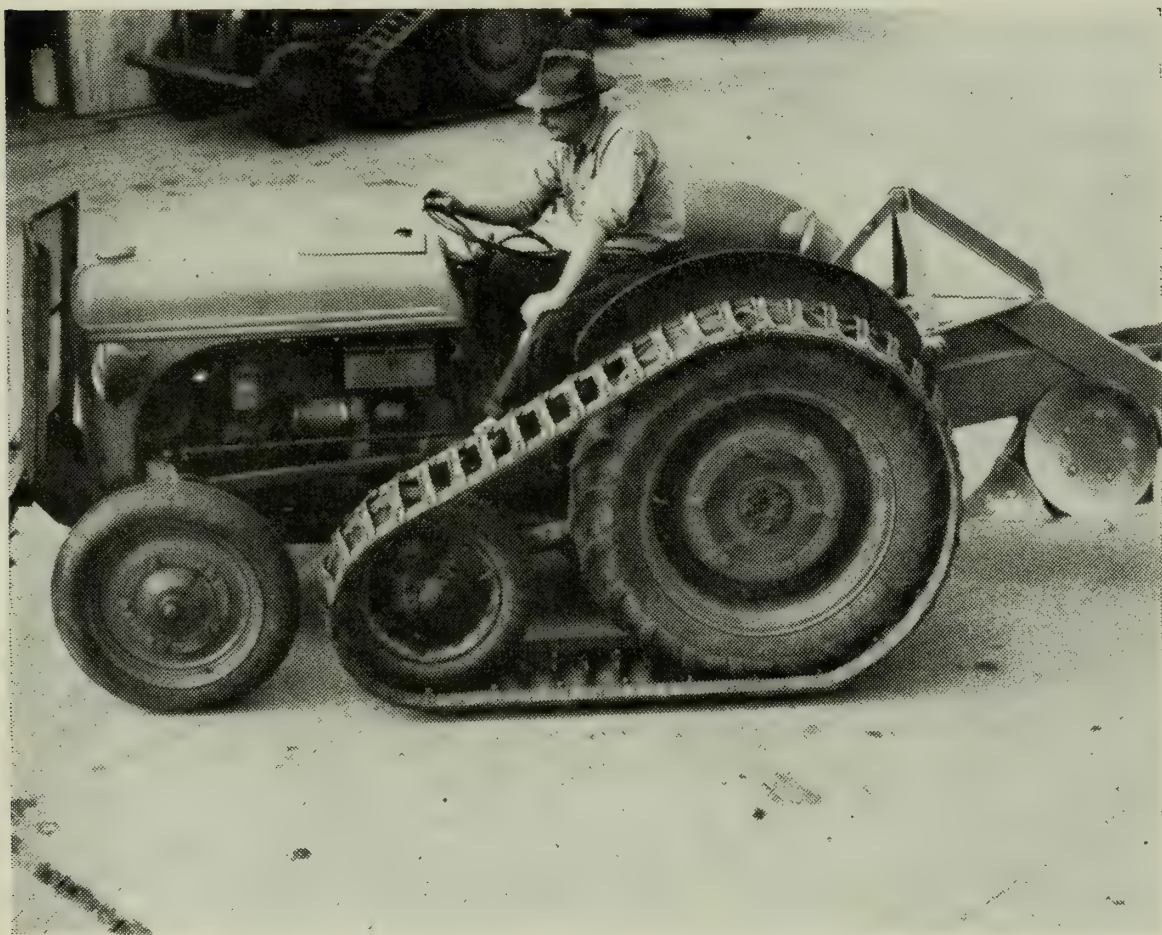
- Constructed 4 C-150 plows.
- Installed 4 sets Bombardier half tracks on tractors.
- Complete overhaul to 5 heavy crawler tractors.
- Three partial overhauls to heavy crawler tractors.
- Complete overhaul to 12 heavy fire plows.
- Complete overhaul to 16 light suppression plows.
- 163 miscellaneous repairs to light tractors and trucks.
- Installed 7 booster pumps.
- Installed 8 sets of booster tanks.
- Reconditioned and re-installed 12 sets of booster tanks.
- Installed 7 sets tool racks on trucks.

### **Experimental Work:**

Due to budgetary reasons, the experimental work heretofore carried on at the Sumter shop was curtailed. Work of this nature was confined to the development of a new light suppression plow suitable for use in the Coastal Plains region. The reason for undertaking this project was that there is no plow of commercial manufacture suitable for these conditions that can be drawn by a light tractor. Preliminary work on the pilot model of this plow was completed in time to send the first model to the Walterboro District in time to be placed in use during the spring

blow-up situation. This plow was thoroughly tested and is considered more than satisfactory.

As a result of these actual tests on going fires, the shop at Sumter was given the job of manufacturing 16 additional "Type C-150" plows. The Commission owns the pattern from which the plow points, the coulter blade, and the disc plow hubs are cast from steel. The 16 additional plows will be completed during the summer and will be placed in operation during the next fire season.



New type fire fighting plow for light tractors developed at Commission's Sumter Shop. Shown mounted on light wheel-type tractor equipped with half-track treads.

### **Warehousing:**

The Sumter Warehouse was operated to some extent for the storage of fire control and other equipment prior to shipment to the field. This project was administered jointly with the other branches.



## FOREST FIRE SUMMARY

During the year, South Carolina experienced the worst fire season in the history of the Commission. Moderate rainfall during most of the late summer and fall months enabled the fire control forces to keep fire occurrence and area burned down to a minimum. However, practically no rainfall was experienced in the coastal plains area from December through February. As a result, this particular area suffered tremendous losses. The month of February proved to be most hazardous when extremely dry weather conditions linked with high winds created very formidable burning conditions. More than one-fourth of all the fires which occurred during the year occurred in February. In addition, approximately one-third of the total acreage burned was experienced in this one month alone.

The Sandhills and Piedmont section of the state experienced their worst period during the month of April when fire occurrence and area burned could be compared on a minor scale to the hazardous period the coastal plains experienced during February.

Rainfall, during the major portion of fire season, averaged much below normal. The dry season build-up began in November when precipitation average 0.08 inches below normal. During the month of December the average rainfall for the state was 1.92 inches or 1.60 inches below the normal.

Only an average of 2.18 inches or 1.30 inches below normal was experienced in January, making this the driest January since 1941. Even though all stations reported below normal rains, the greatest deficiencies were reported in the southern half of the state where the fall was about 35 to 40 per cent of the normal rain. During the latter part of the month forest fire conditions were regarded as extremely grave. Following the trend of the last few months, February was abnormally dry and stations reported an average of 1.25 inches or 2.83 inches below normal precipitation. At this point fire occurrence and burning conditions had reached a state of emergency.

After continued hazardous weather through the first week in March, the dry trend of the past few months was halted by general rains throughout the state.

The fire situation remained about normal until April when rainfall was less than half the normal amount.





A total of 2210 wild forest fires burned more than 72,000 acres in February alone, at the height of the worst fire season in the Commission's history.



Widespread destruction and damage was caused by more than 8000 illegal fires that burned over a quarter of a million acres of South Carolina's forest lands.



Despite very hazardous weather conditions during the two above mentioned months, each of the county unit organizations performed exceptionally well in stopping the spread of those fires which occurred. Through the efforts of District and Unit forces and the many volunteer cooperators which assisted, many thousands of areas of forest land was saved from destruction or damage by wild fires.

### Illegal Fires:

A total of 8,424 illegal fires occurred during the fiscal year. These fires burned 240,304.3 acres, or 2.13 per cent of the total forest area of the state. The average area burned per fire was 28.5 acres. The month of February proved to be the worst fire month of the fiscal year when 2,210 forest fires burned 72,273.6 acres. This was 26 per cent of all the fires which occurred and 31 per cent of the acres burned during the entire year. Even though numerous fires occurred during the months of November and December, the period of greatest hazard and highest fire occurrence was confined to the months of January, February, March and April, when 79 per cent of all the fires for the year occurred. Chester and Pickens Counties had the smallest number of fires, totalling only 35 for each county and burning 268.7 acres and 89.5 acres, respectively. Pickens County, which had the smallest area burned in the state, suffered a loss of 0.05 per cent of the total forest area of the county. Pickens County had the smallest average area per fire with 2.6 acres. A total of nine counties averaged less than 10 acres per fire. Only four counties averaged less than 0.25 per cent of the total forest area in the county burned. Orangeburg County experienced the highest fire occurrence with 953 fires which burned 26,680.8 acres, or 8.37 per cent of the total forest area in the county. Berkeley County followed a close second with 675 fires burning 26,521.7 acres, or 6.65 per cent of the total forest area. Horry County also suffered heavy losses, with 475 fires burning 26,053.3 acres, or 4.67 per cent of the total forest area.

### Causes of Fires:

The greatest cause of forest fires was attributed to incendiarism. A total of 4,059 fires, burning 140,994.8 acres, resulted from this cause. Incendiarism alone caused 48 per cent of all the fires



occurring in the state. Some 1,680 fires were attributed to smokers, burning 28,014.8 acres, and 1,515 fires burning 42,290.3 acres resulted from careless debris burning. These three major causes, namely incendiarism, smokers and debris burning, resulted in a total occurrence of some 7,254 fires, or 86 per cent of the total occurring during the year. The Commission is exerting every effort possible to direct all activities toward the elimination of fires. Inasmuch as the greater per cent, by far, of all the fires occurring in the state are attributed to incendiaries, debris burners and smokers, the bulk of our fire prevention efforts must be directed toward these sources.



Incendiarism, smokers and careless debris burning accounts for 86 percent of the illegal fires that burned during the year.

### **Legal Fires:**

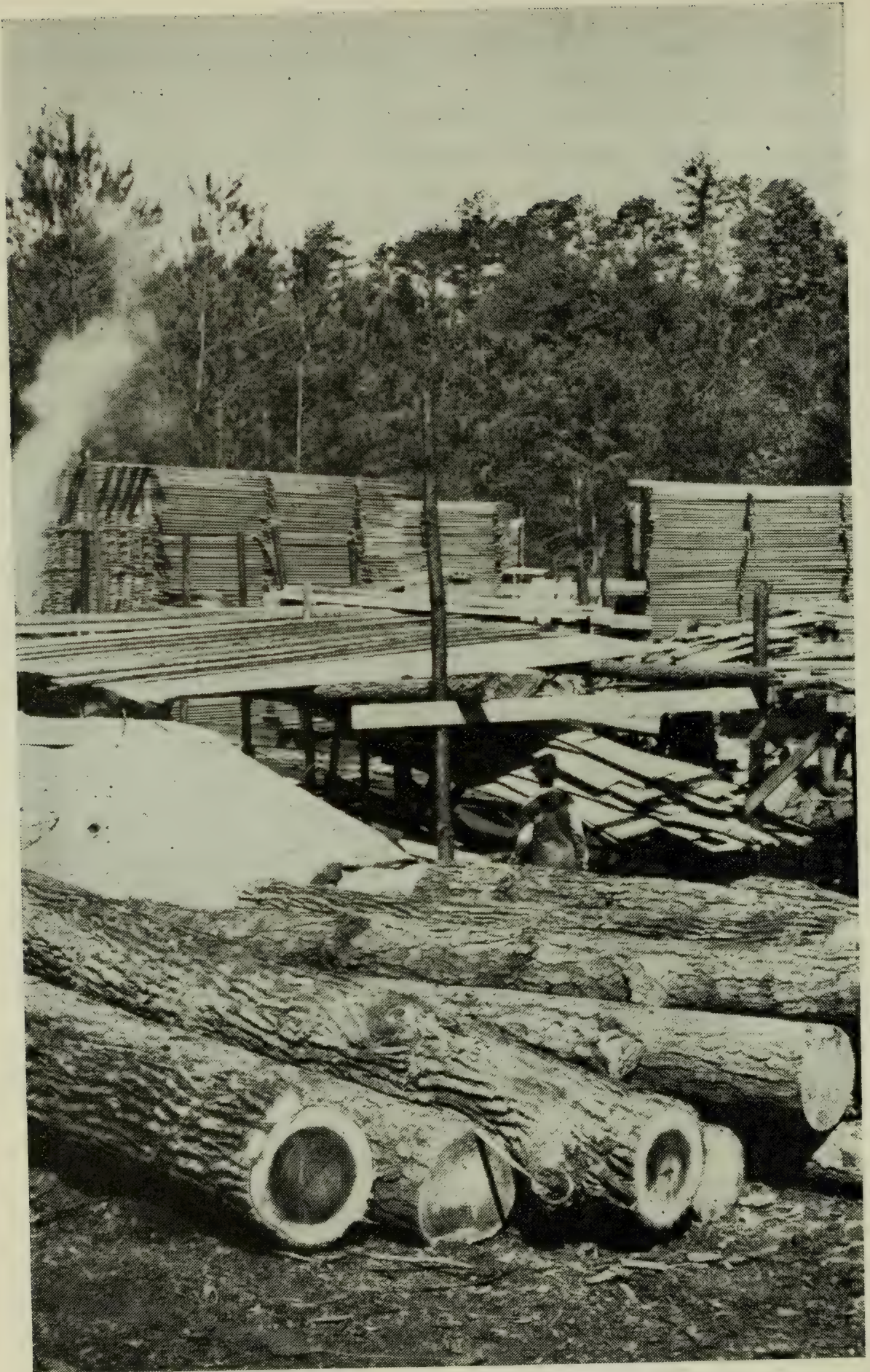
In accordance with all existing laws, no landowner is restricted from burning over his land as long as his fire is not allowed to spread on to or over the lands of another or others. Accordingly, many landowners throughout the state elect to burn over certain woodland areas each year, or each series of years, for various



purposes. As long as the fire is confined to their own property boundary lines, the burning is classified as legal. During the year a total of 2,348 legal fires were set, burning a total of 227,606 acres of forest lands. This represents 2.01 per cent of the total woodland area under protection in South Carolina. 396 fires, burning 22,117 acres, were attributed to landowners desiring to reduce forest fire hazard. For the purpose of game birds and improvements in shooting conditions, 153,371.5 acres were burned by some 154 fires. 334 fires, burning 4,725 acres, were conducted to rid timber areas and all potential forest land of accumulated debris and rubbish. Woodland pasture burning for early grass production and other grazing purposes totalled 887 fires, covering an area of 31,796.6 acres. 577 miscellaneous fires for various reasons such as boll weevil eradication, destructionists, minks, ticks, insects, etc., burned 15,596 acres.

The Commission continued to urge all landowners conducting legal burnings to notify the local fire warden or county ranger or towerman prior to the proposed burning. This enabled a number of the local unit organizations to inspect the sites to be burned and recommend precautionary measures which should be initiated before the fire is started. In addition, the organization has knowledge of the burning and will not undertake to dispatch station personnel to the fire when their services may be more urgently needed elsewhere on going illegal fires. It is hoped that either through better landowner cooperation in reporting their intention to burn prior to the actual mission or a burning permit law for all counties, the hazardous results of the legal fire problem in South Carolina may be improved considerably.





More than 1600 wood-using industries in South Carolina depend upon the state's forests for their supply of raw material.



## FOREST MANAGEMENT

There is a tremendous job facing timberland owners in South Carolina and there is no single, quick and easy answer to better woodland management. The five major tasks ahead are more protection, more planting, stand improvement, waste reduction, and improved cutting practices.

The demand for and production of all forest products in South Carolina continued at a high level during the fiscal year and in view of the international situation these demands for forest products will probably continue for the next several years. A comparison of the state's forest resources in 1947 with that in 1936 indicates that three billion board feet more timber has been cut than has been grown during this 11-year period; therefore, it is imperative that South Carolina take the necessary action to build up the forest resources and to make all forest land more productive.

### PRODUCTION BY YEARS

Year	Lumber	Pulpwood
1942	1,079,351 M Bd. Ft.	946,000 Cords
1943	984,773 M Bd. Ft.	985,000 Cords
1944	850,748 M Bd. Ft.	1,053,500 Cords
1945	723,667 M Bd. Ft.	877,500 Cords
1946	1,005,700 M Bd. Ft.	995,700 Cords
1947	871,014 M Bd. Ft.	948,388 Cords
1948	798,700 M Bd. Ft.	1,108,523 Cords
1949	1,002,000 M Bd. Ft. Est.	1,012,180 Cords
1950	997,000 M Bd. Ft. Est.	1,000,000 Cords Est.

There were twice as many wood-using industries operating in South Carolina in 1947 than in 1936. With these industries expanding and our timber supply shrinking, it is necessary to greatly step up the production of forest lands for the economic and social betterment of the people.

Forest management activities of the State Commission of Forestry conducted to improve the forestry situation and to

better all of the people of the state are explained in detail on the following pages.

### MANAGEMENT ASSISTANCE

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing technically trained foresters to assist landowners in managing their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection and reforestation measures needed.

In cases where cutting of timber is recommended, a representative of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a sample timber sale agreement. The only charge for this service is \$.50 per thousand board feet or \$.13 per cord for timber actually marked and tallied. All other services are provided free of charge.

During the year Commission foresters made 880 woodland examinations on 163,334 acres of forest land, and a total of 13,283,940 board feet and 3,385.3 cords were selectively marked for 242 landowners on 8,427 acres of forest land.

It is estimated that during the year industrial and private consulting foresters marked an additional 117,400 cords of pulpwood and 35,000,000 board feet of sawtimber on 34,000 acres of forest land.





Commission foresters help landowners to mark and estimate their timber for selective harvesting.



## DISTRICT SUMMARY OF WOODLAND EXAMINATIONS AND MARKING ACTIVITIES 1949-50

DISTRICT	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
Aiken .....	144	23,035	73	2,067	4,161,382	678.5
Camden .....	126	15,742	34	806	1,112,865	445.0
Florence .....	141	13,119	26	902	1,201,500	262.4
Kingstree .....	93	27,774	19	797	1,880,721	95.0
Newberry .....	171	29,836	43	2,198	2,413,690	1,587.0
Spartanburg .....	130	12,834	34	1,219	2,024,222	149.0
Walterboro .....	75	40,994	13	438	489,560	168.4
TOTALS .....	880	163,334	242	8,427	13,283,940	3,385.3

## SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	.....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429.0
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
TOTALS .....	3,669	971,623	1,338	120,998	158,780,760	18,829.6





Nearly 35 million tree seedlings were grown at the Commission's Horace L. Tilghman Nursery.



Seedlings were packaged and shipped to more than 4000 South Carolinians for planting.



## REFORESTATION

A total of 34,428,955 seedlings were distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly .....	16,044,350
Slash .....	18,161,705
Longleaf .....	154,150
Spruce .....	58,750
Pride of India .....	10,000

<b>TOTAL .....</b>	<b>34,428,955</b>
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This is the largest number of trees ever produced in South Carolina. Of this total 29,501,955 seedlings were distributed in South Carolina to 4,155 planters. This is almost double the number of landowners who ordered seedlings during the fiscal year 1948-49.

The General Assembly again made it possible for any landowner in the state to receive up to 3,000 seedlings free of charge at the nursery or at 50c per thousand delivered to the nearest express office. See Tables 12 and 13 in the Appendix for a record of seedling distribution by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years:

Year	Seedlings Planted
1928-29 .....	142,000
1929-30 .....	148,000
1930-31 .....	986,000
1931-32 .....	976,000
1932-33 .....	996,000
1933-34 .....	1,031,000
1934-35 .....	7,529,000
1935-36 .....	23,000,000
1936-37 .....	22,000,000
1937-38 .....	11,192,000
1938-39 .....	10,854,000
1939-40 .....	12,244,000
1940-41 .....	21,165,423
1941-42 .....	10,275,037
1942-43 .....	4,742,010
1943-44 .....	5,662,608



1944-45 .....	1,926,840
1945-46 .....	6,402,255
1946-47 .....	1,962,600
1947-48 .....	11,356,990
1948-49 .....	30,338,775
1949-50 .....	29,501,955

TOTAL ..... 214,432,493

It has been the opinion of every forester visiting our nursery that South Carolina has one of the best nurseries in the nation. The cost of producing planting stock was approximately the same as the charge for the seedlings f. o. b. the nursery. Current inventories indicated that 27 million seedlings will be available for distribution during the winter of 1950-51.

### CONE COLLECTION

The cone crop for the fall of 1949 was considered fair. The district foresters were able to secure the cones needed. The number of bushels of cones collected by species and by districts is shown in the following table:

DISTRICT	Slash	Longleaf	Loblolly	Totals
Aiken .....	962.0	220.0	615.0	1,797.0
Camden .....	.....	324.0	1,056.5	1,380.5
Florence .....	.....	943.5	350.0	1,293.5
Kingstree .....	.....	.....	1,404.8	1,404.8
Newberry .....	.....	.....	252.25	252.25
Walterboro .....	648.5	.....	1,479.0	2,127.5
TOTALS .....	1,610.5	1,487.5	5,157.55	8,255.55

From these cones listed in the above table 5,384 pounds of seed were extracted as shown in the following table:

Species	Lbs.	Lbs. Per Bushel
Slash .....	6,71	.42
Loblolly .....	3,165	.59
Longleaf .....	1,548	1.10
	5,384	



More than 8000 bushels of pine cones were collected to obtain seeds for planting at the nursery.

In addition 1,500 pounds of slash and 3 pounds of loblolly pine seed were purchased on the open market.

At the end of the year there were only 1,890 pounds of slash and 2,131 pounds of loblolly seed in storage for use next year.

### FOREST SURVEY

The re-survey of South Carolina's forest resources completed in 1948 by the Commission of Forestry in cooperation with the U. S. Forest Service indicated that altogether, forest lands in the state add up to 62% of the total land area. The annual harvest of timber from this forested area provides raw materials for a manufacturing industry ranking second only to textiles in the value of product.

Current growth per year averages approximately 5.6 million cords of timber while the 1946 level of drain was approximately 6.2 million cords or a deficit of some 3 billion board feet for the period 1936-1947 inclusive. To meet present needs, to plan



for expanding industries, and to make our forest acres more productive, South Carolina needs to grow 6.9 million cords of timber per year.

The survey also shows that the softwood timber type which includes pine, cypress, etc., has decreased by  $1\frac{1}{2}$  million acres while the hardwood timber types have increased by 1.7 million acres. This indicates that a greater trend toward hardwood utilization will have to be made in the future. Timber operators throughout the state were given the benefit of the information contained in the survey report.

To maintain and possibly improve the present forest condition in the state it is necessary to establish more complete fire protection, continue the present rate of planting with a possible improvement in survival, establish more widely improved cutting practices on private timberland holdings, and increase the education of our people.

### FARM FORESTRY

During the fiscal year, six new farm forestry projects were started. This makes a total of seven projects in the state. A summary of the farm foresters' accomplishments is included with the data for each forest district.

### COUNTY AND STATE FORESTS

No additional state forest land was acquired during the year but the total acreage dropped from 130,691 acres to 129,216 acres. This decrease in acreage was caused by redemption of 666 acres of Aiken County Forest Land by former owners and the reconveying of the 809 acres included in the Phelps State Forest to the former owner, Miss Claudia Lee Phelps.

Prior to acquisition, almost all of the land included in state forests was heavily cut over, burned, and generally misused. For that reason it will take a number of years to rebuild these areas to a productive condition:

The state forests are listed below :

1. Aiken County Forest .....	5,722 acres
2. Cassatt State Forest .....	462 acres
3. Harbison State Forest .....	2,202 acres
4. Manchester (Poinsett) State Forest .....	28,830 acres
5. Sand Hills State Forest .....	92,000 acres
<hr/>	
Total .....	129,216 acres

A detailed report of activities on each of the forests follows:

### AIKEN COUNTY FOREST

During the year the acreage in Aiken County Forest dropped from 6,388 acres to 5,722 acres. This loss in acreage is caused by former owners, heirs, or others of interest redeeming approximately 666 acres during the year.

Act No. 748 of 1946 provides that a former owner, heir, or others of interest may redeem forfeited lands within ten years after forfeiting by paying taxes, penalties, cost of betterments and expenses of Aiken County Forest, less any amount of revenue received by Aiken County Forest.

To date boundary surveys have been completed on 68 tracts aggregating approximately 12,638.9 acres. Concrete monuments have been erected to all property corners. All property lines have been thoroughly brushed out and marked with orange paint. Plats of all surveyed tracts have been prepared and filed for record in the office of the Clerk of Court of Aiken County together with deeds and leases.

The Edisto District of the U. S. Soil Conservation Service has surveyed and prepared soil maps of 45 tracts of Aiken County Forest. They have also made recommendations as to the best use of these lands.

This year 4.2 miles of firebreaks were plowed. No fires burned on Aiken County Forest Land during the year.

During the year 50 acres were planted to slash pines. This brings the total area planted to date up to 1,927 acres on 59 different tracts of the forest.

The Forest Director prescribed burning a small woodland area for the purpose of controlling brown spot disease. This area had been planted to longleaf pine during the 1942-43 fiscal year



and were badly infected with brown spot. As a result of the fire, many of the previously infected seedlings now appear to be in a healthy condition.

Only four free use permits were issued. Free use permits allow individuals to cut fuelwood for domestic use, gather pine straw, cut fence posts and other similar use. 6 special use permits covering rental of 58 acres of farmland were issued.

At the close of the fiscal year action on the part of the State Commission of Forestry to withdraw from active participation in the Aiken County Forest Project was completed. The Forestry Commission deemed it advisable to take this action because the acreage of forest land included in the project had dropped below that considered as a minimum for economic operation.

### **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres which is composed largely of scrub oak and open fields. 12 acres were planted to slash pine seedlings during the year. No fires occurred on this forest area during the year. The forest area was surveyed and all corners and property lines were clearly marked.

### **HARBISON STATE FOREST**

The Harbison State Forest comprising 2,202 acres is located in Richland County. During the year approximately 150,000 feet of sawtimber and 500 cords of pulpwood were marked for cutting. No sale was made of this marked timber during the year.

The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the caretaker. No fires burned on the area during the year.

### **PHELPS STATE FOREST**

Phelps State Forest, comprising 809 acres of Sand Hills land located in Barnwell County, was reconveyed by the South Carolina State Commission of Forestry to Miss Claudia Lee Phelps of Aiken, South Carolina, during the fiscal year.

## MANCHESTER STATE FOREST (Formerly Poinsett State Forest)

The name of the Poinsett State Forest was changed to the Manchester State Forest during the fiscal year. This forest comprises 28,838 acres of land and is located south of Wedgefield in Sumter County. This land is leased to the S. C. State Commission of Forestry on a long-term lease from the Federal government.

There are approximately 10,000 acres of scrub oak land which will have to be treated and planted to forest tree seedlings. Much of the remaining 18,000 acres is understocked as a result of heavy cutting, annual burning and general misuse prior to the time this area was leased to the S. C. State Commission of Forestry. Every effort is being made to properly manage this forest to build up the productivity of the land.

### Tree Planting:

A total of 1,303,000 pine seedlings were planted on approximately 1,500 acres of open land on the forest during the planting season. Species planted are as follows:

Slash Pine .....	1,178,000
Loblolly Pine .....	105,000
Longleaf Pine .....	5,000
Spruce Pine .....	15,000
	1,303,000

Practically all of the seedlings were machine planted. Hand labor was used only on small areas which had to be replanted and where it was not practical to use the mechanical planter.

### Forest Products Harvested:

The forest products harvested during the year included the following:

	Quantity	Receipts
Sawtimber (Bd. Ft.) .....	292,549	\$6,862.15
Pulpwood (Cords) .....	330.17	655.87
		\$7,518.02

All sawtimber and pulpwood were selectively marked prior to cutting and sold to the highest bidder.



**Fire Protection:**

On the forest 14 fires burned 217.1 acres during the year. A fire plan for the properties of the S. C. State Commission of Forestry (including Manchester State Forest and Poinsett State Park) was developed during the year. This plan coordinated the activities of the Sumter Unit Fire Control Organization, the personnel of the Manchester State Forest, Poinsett State Park, and private landowners adjoining this area in the prevention, pre-suppression, and suppression of forest fires. The successful execution of this fire plan is probably the reason for the small acreage burned during the year.

Approximately 247 miles of boundary and interior firebreaks were maintained on the forest.

**Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. These camps were used for a total of 7,782 camper days. A detailed report on these two camps will be included in the Parks Division section of this report.

**Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement by the Sumter County Board of Commissioners. The Board of County Commissioners works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to control the area, and handles the stocking of lakes with young fish where needed.

**Agricultural:**

43 tenants rented 1,466.5 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the forest and others assist where needed in the preventing and suppressing of forest fires.

**Roads and Truck Trails:**

A much greater amount of road work was accomplished during the year as a result of the purchase of a second-hand crawler-

type tractor which replaced the worn out crawler tractor previously operated.

### **Telephone Lines:**

21.5 miles of telephone lines in the forest system were brushed out during the year. General maintenance was carried on as needed to keep the telephone system in good working order.

The forest telephone line system was extended a distance of 1.8 miles for the purpose of installing a telephone in the Machine Operator's residence. This connection will greatly facilitate all phases of the state forest work.

### **Silvicultural Practices:**

One ten-acre planting site was burned to remove competing vegetation prior to planting. This was done to observe the effects of the removal of this competing vegetation on planted pine seedlings.

Approximately 25 acres of new plantations were released by the removal of large wolf trees.

Approximately 3 acres of a longleaf pine plantation were pruned during the year.

During the latter part of the fiscal year approximately 155 acres of land on each side of Highway No. 261, north and south of the intersection with the road to the forest headquarters, was cleared of scrub oak and other undesirable hardwoods through the use of a Marden Duplex Brush Cutter and Athens Fire Plow. This area will be planted with slash pine seedlings during the 1950-51 planting season.

Several experimental thinning plots in longleaf pine were established during the year. The purpose of this experimental work was to determine the effect the thinning would have on the growth of the pine. Both plots were established in natural stands of longleaf pine.

### **Maintenance and Repair:**

General repairs were made on the Director's residence and to other buildings at forest headquarters during the year. These repairs consisted of repainting porches and floors and replacing



rotten boards on the chicken houses and painting several of the buildings outside. The water tank at forest headquarters was rebuilt.

The residence occupied by the Machine Operator was re-roofed, a back porch built and screened. All windows and outside doors were screened. A new roof was built on the smoke house.

Seven tenant houses were repainted during the year.

### SAND HILLS STATE FOREST

Sand Hills State Forest located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties consists of 92,000 acres. One-half of the area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities and management of the other one-half of the forest. This area is leased from the Federal government on a 95-year lease agreement.

Before the area was acquired by the government, it was heavily cut over, badly burned, and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand.

#### Tree Planting:

During the year, 628,050 pine seedlings were planted on the forest by planting machines. Species breakdown is as follows:

Longleaf .....	25,000
Slash .....	603,050

#### Forest Products Harvested:

The following forest products were selectively marked prior to cutting and sold to the highest bidder during the year:

Sawtimber (Bd. Ft.) .....	233,766	\$5,773.04
Pulpwood (Cords) .....	565.82	1,937.23
		<hr/>
		\$7,710.27



A 13-year-old slash pine plantation on the Sand Hill State Forest. This is one of many plantations on the state forests that are used for experimental and demonstration purposes.

### **Fire Protection:**

During the year 41 fires burned 3,627.2 acres. A fire plan for the properties of the S. C. State Commission of Forestry (including Sand Hills State Forest, and Cheraw State Park) was developed during the year. This plan coordinated the activities of the Chesterfield Unit Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service, and private landowners adjoining this area in the prevention, pre-suppression, and suppression of forest fires.

A total of 157.6 miles of firebreaks were plowed on the forest with a Ford-Ferguson tractor equipped with a gang disc plow. These firebreaks were from 8 feet to 16 feet wide.

### **Recreation:**

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed



Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area, and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for over-night camping. The District Scout Camporees are also held here. The lake is open to fishing but no swimming is allowed.

Campbell's Pond, colored recreational area, has been reactivated and improved by the Parks Division of the State Commission of Forestry, and has been redesignated Campbell's Pond Negro State Park. This area has been further developed and received very heavy use during the year. A more detailed report will be found in the Parks section of this report.

### **Fish and Wildlife:**

No hunting was allowed on the area during the year, but plans call for the establishment of areas for game preserves on which no hunting will be permitted. It is planned that the majority of the area in the future, however, will be open to public hunting.

Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

### **Agricultural Lands:**

25 tenants rent and farm 1,500 acres of agricultural land on the forest. Practically all of the lands, which were formerly cultivated and which are too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

### **Roads and Truck Trails:**

During the year 57.5 miles of truck trails were graded, brushed out, and washes were filled in. 11 wooden culverts were cleaned out and stringers and decking repaired. Five timber bridges were repaired by replacing rotten deckings and rails. 30 diversion ditches were cleaned out. 4 miles of truck trails were treated with clay topsoil.

### Telephone Lines:

Maintenance of all telephone lines is being handled by the Chesterfield Unit Fire Control Organization, but during the year forest personnel assisted the county forces in repairing interruptions of service on the line.

### Silvicultural Practices:

In addition to tree planting, release cuttings, prunings and the eradication of undesirable hardwoods (scrub oak) was accomplished by the forest personnel. Experiments in controlling scrub oak with Ammonium sulfamate (Ammate) and by mechanical means were continued.

On areas where scrub oak had been treated with Ammate in crystal form applied in cups cut into the stem of the tree, a complete kill was obtained. This chemical was applied in August 1948. During the summer of 1949 a limited amount of stunted sprouts were observed. However, during the summer of 1950 the scrub oak did not sprout at all.

Experiments have also been conducted using Ammate as a spray solution on hardwood sprouts in pine plantations at different strengths ranging from one-third pound per gallon to two pounds per gallon. These experiments were started in August 1948. Since the spraying was instigated in 1948 the pine seedlings have grown an average of 4 feet in height per year as contrasted to a total height of 3 feet the first five growing seasons following planting.

The second method used in eradicating scrub oak was through the use of a Marden Brush Cutter pulled by a 40 H. P. crawler type tractor. After the scrub oak are cut down with the brush cutter the entire area is plowed with a large Athens Fire Plow. This plowing is followed with a second plowing using a small set of discs to aid in pulverizing and leveling the land. After this operation has been completed, this area can be planted to slash pine seedlings through using a mechanical tree planter. To date, 522.5 acres of scrub oak land has been cleared through use of the brush cutter.

After several years of unsatisfactory planting of longleaf, slash and loblolly pine in the scrub oak areas on the forest it was concluded that the reason for the unsatisfactory survival was



a result of the keen competition for food and water. It is believed from experiments which have been conducted that satisfactory survival can be obtained with pine if the scrub oak competition is eliminated. Experimental work in the eradication of scrub oak is not complete or conclusive and will be continued as funds and personnel can be made available to do this work.

### **Maintenance and Repair:**

The Sugar Loaf Mountain Recreation Area was maintained during the year by the forest personnel. The entrance road from the Scotch Road to the Mountain was machined three times, washes filled in and the road brushed out. The big bridge at the lake was repaired and the rotten decking replaced.

The buildings at forest headquarters were repaired as needed. The Director's office and dwelling were re-roofed.

Maintenance work was also done on 8 tenant houses and all forest signs were repaired and painted.





Forestry demonstrations are an important part of the Commission's educational work in getting forestry information to the people of the state.



## PUBLIC RELATIONS

The public relations branch of the Commission of Forestry is responsible for getting Forestry and State Park information and problems before the people of South Carolina. Only when all the people of our state understand forest values and clearly see how bad forestry practices, such as woods burning and destructive cutting, can hurt them and how good forestry practices can bring about a higher standard of living for every person of the state, whether he owns forest land or not, can we expect to produce the maximum amount of timber on each acre of woodland in South Carolina.

To do this tremendous educational job, to get each person in South Carolina to appreciate forest values, and to ultimately give South Carolinians a better way of life through forest conservation, each employee of the Commission has certain public relations responsibilities in connection with his technical duties. Employees make personal contacts, write news releases, hold forestry demonstrations, show motion pictures, assist with FFA school forests and carry on many educational activities for school and adult groups.

Excellent progress has been made on all phases of the Commission's Public Relations program. News editors of newspapers, magazines and radio stations accepted and used material prepared by Commission personnel more readily than ever before. Civic, church, school and other groups requested more speakers on forestry than ever before. Woodusing organizations, Garden Clubs and other groups requested more forestry educational exhibits than ever before. It is felt that this is an indication of increased interest in forestry.

State parks, serving as outdoor classrooms as well as recreational areas, play a big part in making the public conservation conscious.

The following is a more detailed explanation of the many educational activities that are carried on by the Forestry Commission:

### COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

South Carolina again took part in the National Cooperative Forest Fire Prevention Campaign. Colored posters, bookmarks,

blotters, stamps, window cards and other materials carrying the fire prevention message are prepared by the Advertising Council, Inc., and are distributed to all the states through the U. S. Forest Service. This material is then placed before the people of the state by the Forestry Commission, the Clemson College Extension Service, the U. S. Forest Service and the American Red Cross. The agencies were given excellent support by schools, churches, civic organizations, newspapers, radio stations and others.

For several years it was felt that Cooperative Forest Fire Prevention material, though good, was not "selling" the public fire prevention as it should, because it was too general. It had to be suitable to the entire nation. Now, due to the efforts of the Southern Information and Education Chiefs of the individual state forestry departments, the material is being localized. During the year one publication, "Smokey Bear's Story of the Forest", was prepared for use in the south and a series of 13 radio programs featuring "Jelly Elliott and His Three Knotheads" was recorded for use in the south. These are great steps forward and in time more CFFP material will become more usable.

The following table shows the distribution of printed CFFP material. (The book "Smokey Bear's Story of the Forest" is to be distributed during October 1950.)

#### Distribution of Fire Prevention Materials

Posters .....	28,301
Leaflets and Pamphlets .....	23,522
Stamps (sheets) .....	4,360
Bookmarks and Blotters .....	246,126
Other Prevention Material .....	21,006
<b>TOTAL</b> .....	<b>323,315</b>

#### FORESTRY DEMONSTRATIONS

Demonstrations are an excellent way of getting forestry information before the people. During a demonstration, the actual forestry practice, whether it be fire control, reforestation, cutting or other activities, is carried out on the ground. For example, if



the demonstration concerns planting, the group is taken through the planting process step by step, and many fine points are explained orally. To complete the demonstration printed material on planting is given each person present. Demonstrations on other phases of forestry are conducted in much the same manner.

During the year personnel of the Forestry Commission held 198 demonstrations on forest fire protection, correct cutting methods, reforestation and other forestry activities.

Many of these demonstrations were held for Vocational Agriculture Teachers and Veteran Teachers in cooperation with the Division of Vocational Agriculture of the State Department of Education. Professor F. E. Kirkley of the Agriculture Education Department of Clemson College gave extremely valuable aid in making these particular demonstrations successful.



Tree planting demonstrations were held in every county in the state last year.



### Forestry Demonstrations

	No. of Demonstrations	Total Attendance
Aiken District .....	33	944
Camden District .....	42	967
Florence District .....	25	245
Kingstree District .....	23	380
Newberry District .....	26	355
Spartanburg District .....	32	529
Walterboro District .....	17	785
<b>TOTAL</b> .....	<b>198</b>	<b>4,205</b>

### CONSERVATION WEEK

Conservation week is the one week during the year that is especially set aside to call to the attention of all our people the necessity of wise use of all our natural resources. Governor J. Strom Thurmond proclaimed the week of November 27 to December 3 as Conservation Week, with Friday, December 2 of that week, as Arbor Day.

Many people, agencies, and organizations cooperated to make Conservation Week a success. The Garden Club and the Federated Women's Club of South Carolina sponsored the observance of Conservation Week with the Commission of Forestry. The Clemson College Extension Service, the Soil Conservation Service, the State Department of Education, newspapers, radio stations and other groups cooperated in placing the problem of Conservation before the people of South Carolina.

Realizing that special school materials would be needed during Conservation Week the Forestry Commission prepared a double issue of "Forestry and Park Notes" devoted to the wise use of our forest resources. In addition, a program page was printed. This material was distributed to schools, churches, civic and patriotic organizations and other interested groups.

Personnel of the Forestry Commission and other groups gave numerous talks at meetings held during the week.

The Clemson College Extension Service and the State Commission of Forestry arranged for the planting of many forest tree seedlings on Arbor Day.

A summary of Conservation Week activities follows:



### Conservation Week Activities

	No. of Groups Participating	No. of Indi- viduals Attending
Aiken District .....	100	14,129
Camden District .....	137	6,869
Florence District .....	95	3,385
Kingstree District .....	97	10,702
Newberry District .....	220	13,635
Spartanburg District .....	178	18,219
Walterboro District .....	98	6,454
<b>TOTAL</b> .....	<b>925</b>	<b>73,393</b>

### TOWERSITE IMPROVEMENT CONTEST

The objectives of the annual tower site improvement contest are to encourage a complete "live-at-home" program, and to improve and develop the small areas of state owned land that make up the towersites.

This contest is held for the benefit of the 134 lookout towermen evenly distributed over the state, and it succeeds in arousing considerable competition among the towermen.

Because of the necessity of locating towers on high points, many tower sites are on poor, unproductive land. The contest has encouraged the towermen to build up, develop and beautify even the worst of these areas, while, at the same time, making a better living for his family and himself.

All during the year, the towermen and their families plant flowers, grass and shrubs, grow and can vegetables and fruit, raise livestock and poultry, keep the towers and other buildings clean and in good condition as well as keep a sharp lookout for woods fires.

This year the following winners were selected:

Laurin T. Sessions, towerman at Tyson Tower in Georgetown County, was judged first prize winner. Mrs. R. C. Timmerman, towerlady at Epworth Tower in Greenwood County and E. B. Wilson, towerman at Philadelphia Tower in Darlington County tied for second place. G. P. Kolb, towerman at Black River Tower in Sumter County, was third place winner. Mrs. Thelma Garvin, towerlady at Adams Run Tower in Charleston County

and W. J. Kieffer, towerman at Okeetee Tower in Jasper County tied for fourth place. Each of these towermen also won first prize or tied for first prize in the contest in the forestry district in which the towers are located.

Other district winners were:

Mrs. Ruth W. McGee, Stringer Ridge Tower, Anderson County, first Spartanburg District prize; Mrs. Clara Morgan, Oakway Tower, Oconee County, second Spartanburg District prize; D. S. Robinson, Simpson Tower, Fairfield County, second Newberry District prize; Miss Isabel Edwards, Rowesville Tower, Orangeburg County, first Aiken District prize; O. L. Chaplin, Orangeburg Tower, Orangeburg County, second Aiken District prize; K. O. McCaskill, State Park Tower, Richland County, second Camden District prize; M. C. Coker, Winyah Bay Tower, Georgetown County, second Kingstree District prize; and Ed. Bradshaw, Mont Claire Tower, Darlington County, second Florence District prize.

### MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation to the public. Many times films are used to supplement lectures or talks. Good progress has been made on the Commission's motion picture program.

This year, for the first time, personnel of the Forestry Commission were properly equipped to carry on a motion picture program. Each district office was equipped with a motion picture outfit complete with screen and sound apparatus. Formerly two motion picture units were routed around the state and they made practically all of the showings during the year. Now, all personnel from the seven district offices make showings.

Films on forest fire control, forest management, reforestation and other forestry subjects were shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

This educational activity could be much stronger than it now is. Good educational forestry films are needed to strengthen the program.

The number of showings and attendance by district is shown below.



### Motion Picture Showings 1949-50

	Number of Showings	Total Attendance
Aiken District .....	27	1,717
Camden District .....	59	5,264
Florence District .....	60	2,159
Kingstree District .....	54	4,227
Newberry District .....	75	2,876
Spartanburg District .....	8	444
Walterboro District .....	11	1,294
Columbia Office .....	9	503
<b>TOTAL</b> .....	<b>303</b>	<b>18,464</b>

### VOCATIONAL AGRICULTURE SCHOOL FORESTS

An excellent means of getting forestry information before many people is through the school forest program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. Each year forestry training schools are held for all vocational agriculture teachers in the state. They are taught the latest methods of forest fire protection, reforestation and forest management at these training sessions by personnel of the State Commission of Forestry. The teachers then carry the information back to their students who use it in their work on their school forests. Professor F. E. Kirkley of Clemson College has been the "guiding hand" of this most excellent teacher training program.

School forests are excellent aids in teaching forestry. They are outdoor classrooms where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which tree to cut—which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This good and practical experience does not stop with work on the school forest or with the student. He takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own

land. This tends to make them, as well as all members of their family, strong conservationists.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes.

The Forestry Commission sponsors the School Forest Contest. Each year modest prizes are given the schools and teachers who have the best school forests. The FFA student in each county who has the best home forestry project is rewarded with a free trip to the Commission-sponsored Boys' Forestry Camp.

The following schools were awarded prizes in the contest:

Blackstock High School and Saluda High School tied for first prize in the upper-state division. Ehrhardt High School won first place in the lower-state division.

Edgefield High School won second prize in the upper-state division and Edmunds High School of Sumter won second place in the lower-state area.

Chesterfield and Jonesville High Schools tied for third place in the upper-state division and Fletcher Memorial School won third place in the lower-state area.

The objective of the Forestry Commission and the Division of Vocational Agriculture is to have at least one school forest in each county in the state. They are invaluable as demonstration areas and teaching aids and they stimulate much interest among the people of the community in which they are located. In some cases delegations of townspeople have gone to agriculture teachers and have asked for a detailed explanation of the activities being carried on on the forest. This indication of interest shows the value of school forests.

Schools completing a major portion of their school forest work are as follows:

Aiken District: Ehrhardt and Monetta.

Camden District: Camden, Ashwood, Edmunds, Sherwood, Chesterfield and McBee.

Florence District: Fletcher Memorial, Dillon, Lakeview, Lamar, Latta and Conway.

Kingstree District: Cross, Berkeley and St. Stephens, Manning, Andrews, Kingstree, Indiantown, and Williamsburg.

Newberry District: Chester, Edgefield, Blackstock, John de la Howe, Pomaria and Saluda.



Spartanburg District: Pendleton, Cleveland, Jonesville and Rock Hill.

Walterboro District: Harleyville, St. George, Brunson and Ridgeland.

### RESOURCE USE EDUCATION

In 1948 and again in 1949, the State Department of Education requested that the State Commission of Forestry send a representative to the Southern States Work Conference at Daytona Beach, Florida. The Conference set up a committee on "Resource Use Education" to write a booklet that would help teachers relate the school program to the improvement of living and to the community.

This year the booklet was published under the title "Learning by Living: Education for Wise Use of Resources". It should prove very helpful to teachers and others who are working for the conservation of natural resources.

Resource Use education ideas have stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the State Parks for this purpose. It has been demonstrated that camping on school time and using these facilities create a very effective teaching situation.

The State Commission of Forestry welcomes this instructional use of State Parks.

### TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry before many groups. The quality of talks has improved considerably during the past year due to training and the use of colored slides in illustrating the various lectures. The use of the colored slides with the talks undoubtedly made the talks much more interesting to the groups. The Commission's Branch of Public Relations has over 800 colored slides on all phases of forestry. The slides are available to all members of the organization and they have used them a great deal in illustrating their talks and lectures as well as using them as a training aid during personnel training sessions.

As talks are improved, more people will retain more of the forestry information given them through this medium.

During the year a total of 1,625 talks were made by Forestry Commission personnel before 83,798 people. Garden Clubs, church groups, school groups, civic and patriotic organizations were among those requesting talks.

The number of talks and attendance by district and state offices is shown below:

<b>Talks</b>		
	<b>Number of Talks</b>	<b>Total Attendance</b>
Aiken District .....	333	26,608
Camden District .....	231	8,361
Florence District .....	171	5,600
Kingstree District .....	153	7,386
Newberry District .....	412	16,916
Spartanburg District .....	71	3,607
Walterboro District .....	130	5,230
Columbia Office .....	124	10,090
<b>TOTAL</b> .....	<b>1,625</b>	<b>83,798</b>

## **RADIO**

Radio is becoming more and more valuable in getting forestry and park information and problems to the people. No other means can get emergency information to the people as quickly as can radio. During the past fire season, which was the worst in the Commission's history, it was necessary in some instances, that the people of the state know the fire conditions immediately. In many cases information was given radio stations by telephone and in a matter of minutes it would be on the air. Cooperation such as this is invaluable. Flashing emergency information to the people is just one of many ways that radio has been helpful and useful to the Forestry Commission. Several districts have regular educational radio programs. Two districts put on several programs a week. All districts have used radio to some extent.

An outstanding example of the use of radio was the airing of the "Jelly Elliott" recorded series. This series concerned fire prevention generally and ran for 13 weeks on 24 radio stations



in the state. This excellent coverage is an indication of the fine cooperation given the Commission by the radio stations.

The quality of radio work improved greatly. Some of the foresters became so adept at putting on radio programs that they did not use a prepared script but ad-libbed instead. According to all reports, these informal programs were better than the ones in which a prepared script was used. As Forestry Commission personnel become more experienced in radio work, undoubtedly the programs will become more informative and interesting and will, of course, become a more effective educational tool.



One of the special exhibits placed by the Commission using the automatic slide projector.

## EXHIBITS

Demand by county fair organizations, Garden Clubs, church, school and other groups for educational forestry and park exhibits was greater than ever before. Forestry Commission personnel welcomed the numerous requests for these exhibits because it is recognizing that this medium provides an excellent opportunity for placing forestry and park information before the people.



The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits in an effort to attract the attention of people attending fairs, expositions and gatherings.

Prior to last year, an exhibit was rarely requested except for state and county fairs. During this year, Garden Clubs and other groups requested exhibits at intervals throughout the winter and spring. This is an indication of interest in forestry by various groups of people.

State and county fairs, expositions and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and park information through personal contacts with the public by Commission personnel on duty and through the distribution of literature.

The following is a record of exhibits displayed:

#### RECORD OF EXHIBITS—1949-50

Location of Exhibit	Type of Exhibit	Estimated Attendance
<b>County Fairs:</b>		
Aiken .....	Photo-mural—Fire Control .....	4,000
Darlington .....	Photo-mural—Forest Management .....	1,000
Darlington .....	Equipment display—Fire Control .....	600
Florence .....	"History of Forest Fire Protection in South Carolina" .....	15,000
Florence .....	Equipment Display—Fire Control .....	500
Loris .....	"History of Forest Fire Protection in South Carolina" .....	8,000
Conway .....	Equipment Display—Fire Protection .....	2,000
Marion .....	Equipment Display—Fire Protection .....	4,000
Marion .....	Photo-mural—Forest Management .....	12,000
Camden .....	Photo-mural—Forest Management .....	13,000
Lancaster .....	Photo-mural—Forest Management .....	9,000
Bishopville .....	Photo-mural—Forest Management .....	25,000
Sumter .....	Fire Prevention—Automatic Slide Machine—Colored slides—Econolite Display .....	25,000
Sumter (Colored) .....	Fire Prevention—Automatic Slide Machine—Colored slides—Econolite Display .....	17,000
Kingstree .....	"History of Forest Fire Protection in South Carolina" .....	8,000
Moncks Corner .....	"History of Forest Fire Protection in South Carolina" .....	4,000
Manning .....	Photo-mural—Timber Marking .....	5,000
Chester .....	Picture Display—Conservation .....	31,000
Greenwood .....	Photo-mural—Forest Management .....	65,000
McCormick .....	Photo-mural—Forest Management .....	3,300
Newberry .....	Picture Display—Conservation .....	12,000
Anderson .....	Fire Control and Forest Management Display .....	40,000
Greenville .....	Fire Control and Forest Management Display .....	35,000
Greenville .....	Fire Control and Forest Management Display .....	5,000
Walhalla .....	Fire Control and Forest Management Display .....	8,500
Pickens .....	Fire Control and Forest Management Display .....	7,500
Union .....	Photo-mural—Forest Management .....	2,500
Union .....	Picture Display—Conservation .....	500
York .....	Picture Display—Conservation .....	10,000
Charleston (Colored) .....	Photo-mural—Fire Control .....	10,000
Walterboro .....	Window Display .....	5,000
Colleton .....	Photo-mural—Forest Management .....	6,000
Georgetown (Colored) .....	Photo-mural—Forest Management .....	3,000





A portion of the Commission's exhibit at the 1949 State Fair.

**State Fair:**

Columbia (White) .....	Fire Prevention—Automatic slide projector showing colored slides continuously with 8 other panels carrying colored pictures, fire displays and fire prevention messages .....	200,000
Columbia (Colored) .....	Fire Prevention—Automatic slide projector showing colored slides continuously with 8 other panels carrying colored pictures, fire displays and fire prevention messages .....	80,000

**Exhibits Other Than County or State Fairs:**

Orangeburg (Flower Show) .....	Automatic Slide Projector—Fire Prevention .....	2,500
Myrtle Beach (Carolina Lumber Dealers Assn.) .....	Automatic Slide Projector—Seed to Sawmill .....	5,000
Marion (American Wood Products Exposition) .....	Automatic Slide Projector—Fire Prevention and Picture Display—Conservation .....	5,000
Charleston (Flower Show) .....	Automatic Slide Projector—Seed to Sawmill .....	2,500
Darlington (Flower Show) .....	Picture Display—Conservation .....	2,000
Cameron (Flower Show) .....	Picture Display—Conservation .....	1,500
Greenville (Acres of Diamonds Exposition) .....	Automatic Slide Projector—"South Carolina's Forests Acres of Diamonds" .....	15,000
Timmons ville .....	Automatic Slide Projector—Seed to Sawmill .....	1,000
Columbia (Acres of Diamonds Exposition) .....	Automatic Slide Projector—"South Carolina Forests Acres of Diamonds" .....	30,000
Columbia (Social Workers Conference) .....	Picture Display—Conservation .....	4,500
<b>TOTAL .....</b>	<b>.....</b>	<b>746,400</b>

## **SOUTHERN STATES PUBLIC RELATIONS CONFERENCE**

Assistant State Foresters in charge of public relations in state forestry agencies in thirteen southern states met in March 1950 in Alexandria, La. Significant progress was made in developing plans for low-cost educational materials to be cooperatively financed.

Production of "Smokey Bear's Story of the Forest" was achieved this year. This is a child's story that simply and effectively develops an appreciative attitude toward our natural resources. Radio series, exhibits, literature, and other educational media are in present plans.

## **TRAINING**

Because the Forestry Commission wishes to always improve its educational technique and methods, continuous training of technical personnel and unit rangers is carried on. This has paid untold benefits. It has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective and all other phases of the public relations program have improved due to training.

Every employee of the Forestry Commission is a public relations man every day of the year. He must be trained to do the public relations job, just as he must be trained to use a piece of fire fighting equipment. During the state fire control training meeting held in August 1949, instruction was given technical men and county rangers on news articles, radio programs and handling landowner meetings. Equipped with these basic public relations tools, both technical and county personnel returned to their jobs better prepared to do the job.

Follow-up training periods for unit personnel extended this training to all fire control forces in each county. Detailed public relations instruction was also given the technical foresters at the forest management training meeting which was held in October 1949.

On the job public relations training was carried on at all times.



## PUBLICATIONS AND POSTERS

An excellent way of carrying park and forestry information to the people of the state is through printed material—leaflets, folders, booklets and posters.

It is necessary that the Forestry Commission have on hand great quantities of up-to-date printed material that explain all phases of forestry and park work. Requests for such information come in daily. These requests must be filled. Material must be available for distribution to people attending forestry talks, exhibits, demonstrations and other activities. Many forestry practices must be promoted. The people must be shown that forestry is good business. Printed material does this job if it is good material.

The public relations branch of the Forestry Commission is charged with preparing such publications, and each year publishes several leaflets, booklets, pamphlets, and folders. During the year a reforestation booklet entitled "Plant Your Trees Right" was printed. A folder entitled "Camping in South Carolina's State Parks" was printed. A Tree Farm folder for South Carolina was prepared in cooperation with the Southern Pine Association and the Clemson College Extension Service.

Because there was every indication that there would be much woods burning in an effort to control the boll weevil, a leaflet entitled "The Boll Weevil Can Be Stopped" was printed in cooperation with Clemson College. This leaflet encouraged the use of poison to kill the boll weevil and pointed out that woods burning was ineffective. A 16-page booklet printed in two colors entitled "Woodlands That Pay" was published. This booklet takes the reader through a woodland management case from the time he makes a request to the Commission of Forestry for assistance to the time his *marked* timber is cut and sawed. It shows the service that a landowner may expect from the Commission. A publication such as this has been needed for some time.

A fire prevention leaflet featuring full color pictures entitled "By Our Own Hand" was printed. This leaflet brings out the value lost when young trees are burned and killed by annual fires even though they burn slowly.

Three issues of "Forestry and Park Notes" including one Conservation Week double issue were printed. Fifty thousand copies of each issue are printed and this inexpensive publication has

proven invaluable in carrying information to the people. One issue was a special edition for the recording of the dedication of Fort Watson. It also included statistics on all State Parks as an inexpensive medium for this subject.

The public relations branch strives to make each publication as interesting, readable and attractive as possible. Simple language is used and when possible the publications are printed in several colors.

Twenty-five thousand posters with the simple but effective message "Stop Woods Fires" were printed. They may now be seen on many roads of the state.

One thousand copies of the Fire Law poster were printed.

The State Highway Department cooperated with the Commission in placing an illustrated fire prevention circular between 480,000 license plates.

The State School Book Commission again cooperated with the Commission in the preparation and distribution of 1,000,000 textbook covers, carrying forestry and state park messages, for the use of South Carolina school children.

#### Distribution of Literature

Posters .....	39,463
Bulletins and Leaflets .....	101,704
License Plate Inserts .....	480,000
Book Covers .....	1,000,000
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TOTAL .....	1,621,167

#### NEWS RELEASES AND ARTICLES

Probably more progress has been made on the news article phase of the Commission's public relations program than any other. Newspapers and magazines accepted and used material prepared by personnel of the Commission more readily than ever before. This is largely due to better quality of work being handed the editors. The material is also more acceptable to the readers in that it is more readable and more interesting. This improvement is due primarily to public relations training.

During the year district and county personnel prepared 1,014 news articles. An additional 46 releases were prepared by Co-

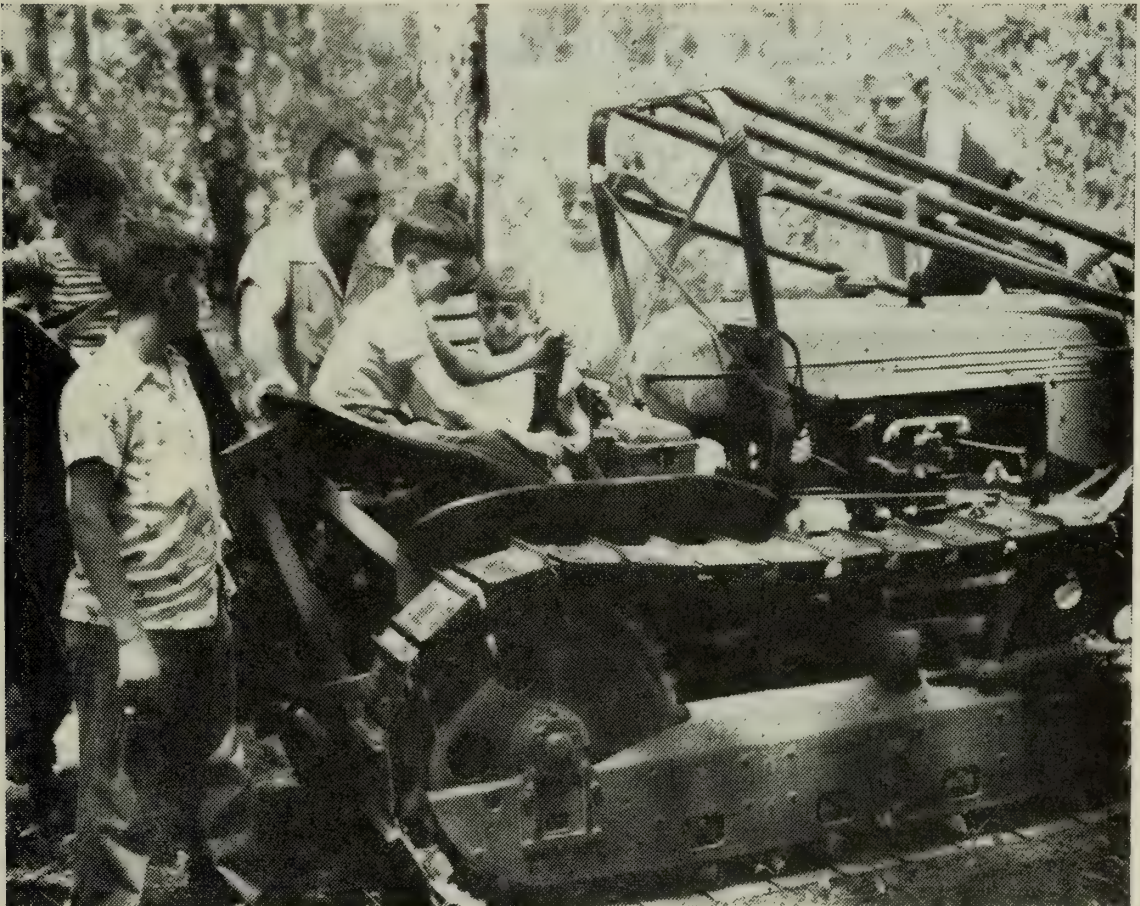


lumbia office personnel. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during the critical fire situation, news items would be given orally to individual reporters and to the wire services. In some cases these articles were on the front pages of newspapers all over the United States.

In addition to prepared news releases, several feature articles on the various phases of parks and forestry were prepared. Pictures or prepared mats illustrating the story were always sent along with the feature. More forestry and parks pictures were printed in newspapers, magazines and other publications this year than ever before.

The Forestry Commission is fortunate in that personnel in every county of the state prepares news articles. In this way, news is localized. It makes better reading for the public and is more acceptable to editors.

The excellent press coverage has greatly helped place forestry and park news before the people.



Boys from every county in the state attending the Annual Boys Forestry Camp learned about fire control equipment and other phases of forestry and parks work.



## **BOYS FORESTRY CAMP**

The third Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 15-20. Seventy-two young men representing every county in the state attended the week long camp. Two boys from each county attended in most cases. One boy was the FFA student in each county with the best home forestry project. The other was the boy chosen on the basis of writing the best letter to his county ranger.

During the week the boys studied such subjects as fire control, forest management, reforestation and state parks. There was a healthful and well-rounded athletic and recreational program provided the campers. The boys had "the time of their lives" and learned forestry at the same time.

## **SIGN AND WOODWORKING SHOP**

Personnel of the sign and woodworking shop continued to construct routed letter signs, picnic chairs and tables, build fair exhibits and do necessary cabinet and carpentry work. This work benefitted forestry greatly during the year. The distinctive routed letter signs easily identified the various installations with the Commission of Forestry and made them easier to use. Fine work was done on exhibits and in many cases shop personnel made valuable suggestions that improved the exhibits considerably.

Good progress was made at the sign shop during the year.

## **SOUTH CAROLINA TREE FARMS SYSTEM**

The South Carolina Tree Farms System was set up to recognize the many deserving landowners who practice good forestry. To become a tree farmer a landowner must prevent woods fires and take all reasonable precautions against them. In addition, he must apply sound cutting practices to existing timber and must plant areas that will not reseed naturally. After a tree farmer is certified, his property is marked with a Tree Farm Sign. His neighbor and people passing by may see good forestry practices and come to understand forest values. Tree farms are also effective places to hold demonstrations on all phases of forestry.



The Tree Farm movement is sponsored in South Carolina by the State Commission of Forestry and the Clemson College Extension Service.

Before a landowner can be certified as a Tree Farmer, his application must pass the County Tree Farm Committee which is made up of the District Forester, County Agent, and a member appointed by the County Forestry Board. After clearing this committee, the application goes to the State Committee which takes final action. This committee is made up of prominent citizens of the state interested in the advancement of forestry. They are: James H. Graham, Charleston; C. P. Key, Lodge; Oswald Lightsey, Miley; Director D. W. Watkins, Clemson; S. B. Huff, Piedmont; and C. H. Flory, Columbia. Assistant State Forester John C. Witherspoon is Secretary of the State Committee.

There are now 50 Tree Farms in the state comprising 435,856 acres.

Landowners who have qualified under the S. C. Tree Farm System this year are as follows:

Name	County	Acreage
Mrs. E. M. Williamson and McIver Williamson .....	Darlington .....	1,225
H. N. Slater (The Pine Tree Timber Co.) .....	Jasper .....	4,000
George Roberts .....	Jasper .....	50
Oscar Wigington .....	Oconee .....	2,940
Union Bag & Paper Corp. ....	Jasper, Beaufort, Colleton, Hampton .....	53,770
Southern Kraft Division of International Paper Co. ....	Georgetown, Berkeley, Williamsburg .....	104,363
Fairfield Forest Products Co. ....	Aiken, Cherokee, Chester, Edgefield, Fairfield, Greenwood, Kershaw, Lancaster, Laurens, McCormick, Newberry, Richland, Saluda, Spartanburg, Union .....	110,256
J. H. A. Carter .....	Bamberg .....	200
Niles C. Clark .....	Laurens .....	665
S. W. Mims .....	Dorchester .....	1,600
TOTAL .....		293,469





The lakes and streams in the State Parks provide fishing pleasure for young and old.



## STATE PARKS

In the fourteen years that have elapsed since the first park visitor strolled through the newly opened gates at Myrtle Beach State Park on July 1, 1936, there has been a steady increase both in visitors and in Parks until now nineteen State Parks are called on to receive the ever enlarging crowds of park users—park users that have this year reached the all-time high of over two million!

A brand new achievement record has been attained when 2,089,712 visitors found their way into State Parks during the 12 months' period ending June 30, 1950.

Following that first park user at Myrtle Beach were others who found Poinsett ready for guests on August 5, and Aiken on August 19, of the same year. Thus the snow ball began growing and a new way of life was being started for South Carolinians.

The first million attendance figure was recorded in 1941-1942, just before the war years. From 1942 to 1945 there was a decided decline in park users—in fact, two of the areas literally went to war, when the Air Corps took over Myrtle Beach and the Coast Guard found use for Edisto Beach. For the past four years there has been a strong build-up of use until now the two million total has been registered.

Elsewhere in this report will be found a table of attendances with breakdowns as to parks and uses. There is also the count showing that nearly half-a-million cars and buses used highways and park roads in bringing these visitors.

South Carolina is liberally served with nineteen State Parks and any further expansion of areas for white people should be carefully surveyed. With the beginning of a new park in Dillon County and another in the making at the Clark Hill project, the state will be so dotted with these state maintained areas that no family in South Carolina will be more than forty miles distant from one of these parks. Full consideration should be given, however, to increasing both the number and the facilities of the areas for the colored people of the state.

No new parks were added during the fiscal year, but a few major improvements were noted. A bathhouse was added at Rivers Bridge, to round out the new pool area. At Lee State Park the recreation building was begun after a year's delay and at





Safe swimming can be enjoyed at the state parks under the watchful eyes of Red Cross trained lifeguards.

Myrtle Beach State Park a new and different facility was born in the form of a 640-foot fishing pier. In early spring a hard-surfaced road further opened up the tropic jungle of Hunting Island and enabled lease-holders to view for the first time their Beach Village lots. This road runs  $2\frac{1}{2}$  miles south from the bath-house and parallels the ocean, becoming Palmetto Boulevard in the Beach Village. Electricity was extended by the Power Company from mainland to Hunting Island State Park.

Noticeable progress is being made in the on-the-job training of State Park personnel. The annual superintendents' training meeting, held again this spring at Poinsett State Park, was perhaps the best gathering yet held.

The Southeastern State Park Directors' Association established a short course in State Park Administration at North Carolina State College at Raleigh and the first session was held in February, with six of our superintendents attending. In the two weeks intensive training the varied problems of normal State Park operation were discussed, including lectures by technical ex-



perts, panel sessions and field trips. It is planned to enroll a different group of superintendents each year until all have had the training.

The nineteen State Parks, with their acreage, location, date established or acquired, and date opened for visitors, are shown as follows:

Park Name	Acreage	Location-County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	867	Aiken .....	July 1934	Aug. 1936
Barnwell .....	252	Barnwell .....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield .....	March 1934	July 1939
Chester .....	523	Chester .....	May 1935	July 1939
Croft .....	7,135	Spartanburg .....	May 1949	June 1949
Edisto .....	1,255	Charleston .....	Feb. 1935	June 1937
Givhans Ferry .....	1,235	Dorchester-Colleton ..	Oct. 1934	June 1937
Greenwood .....	1,114	Greenwood .....	April 1938	July 1940
Hunting Island .....	5,000	Beaufort .....	July 1938	June 1941
Kings Mountain .....	6,141	York-Cherokee .....	Nov. 1934	June 1940
Lee .....	2,839	Lee .....	June 1935	June 1941
Myrtle Beach .....	323	Horry .....	Aug. 1934	July 1936
Oconee .....	1,165	Oconee .....	July 1935	June 1937
Paris Mountain .....	1,275	Greenville .....	April 1935	June 1937
Poinsett .....	1,000	Sumter .....	Aug. 1934	Aug. 1936
Rivers Bridge .....	390	Bamberg .....	May 1945	July 1945
Santee .....	2,364	Orangeburg .....	Jan. 1942	June 1949
Sesqui-Centennial .....	1,500	Richland .....	Aug. 1937	June 1940
Table Rock .....	2,860	Pickens .....	May 1935	June 1940
<hr/>				
44,599				

## OPERATION AND MAINTENANCE

A cost study of parks operations and maintenance brings interesting information. The operating budget for nineteen State Parks for the fiscal year 1949-50 amounted to \$266,398. During the period 2,089,712 visitors were received in the parks. Thus the gross cost was only 12.2 cents per park visitor.

To repair and maintain the park buildings, facilities and equipment we have the astonishing low cost of only 1 3/4% of valuation. Of course, \$22,000 is entirely too little to spend on maintaining property investment worth \$1 1/3 million. In view of the sharp reduction in appropriations (\$235,000 for 1950-51 as against \$266,398 spent in 1949-50) there will be even less money available for maintenance repair, and there is sure to be an accumulated build-up of deferred maintenance. We need a minimum of 2% of valuation to maintain and keep in repair the property and facilities of the State Parks.

It is interesting to note that in addition to 44,599 acres of land, 110 miles of roads, 25 miles of power lines, 110,750 feet of pipe lines and 740 acres of lakes, we have the more expensive maintenance facilities of 500 buildings, 29 water storage tanks, 24 swimming areas, 26 trucks and tractors, 25 lawn mowers and



75 units of pumps, motors and the like. Industrial men tell us they set up 5% and more to cover maintenance costs. We should have a somewhat comparable figure.

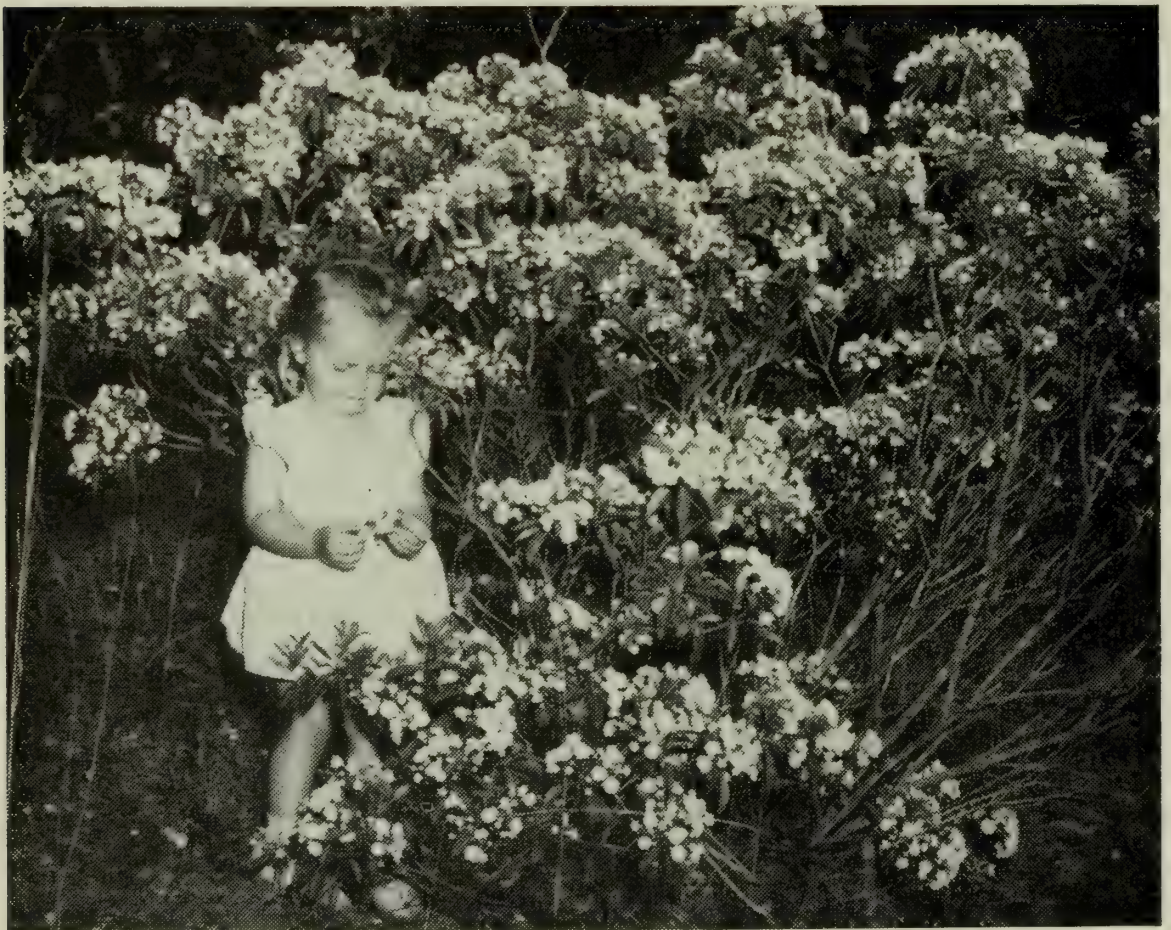
In connection with the above operations and maintenance costs, we list below, by parks, some of the more specific items of general repair. Out of operation funds comes cost of vehicle maintenance and a multitude of routine items impractical to list.

**Aiken:**

Regraded terraces and landscaping at bathhouse; replacement of picnic tables; concrete floor in picnic shelter; repairs to superintendent's residence and electric wiring.

**Barnwell:**

Repaired and painted all boats and picnic tables; installed drains at bathhouse; replaced decking on water tank.



South Carolina's natural beauty is preserved in the state parks for all to enjoy.



**Cheraw:**

Extended brick foyer at bathhouse; enlarged beach; rebuilt amphi-theatre; reconditioned entire "Dogwood Picnic Area"; built fishing boat dock and shelter for fishermen; repaired and painted boats, picnics tables, bathhouse, mess hall, and kitchen in both group camps; also general repairs in both group camps and all cabins.

**Chester:**

Wired new picnic shelter and latrine for lights; sanded and refinished floor in recreation building and painted kitchen and toilets; replaced main water pump; completed grading and seeding new playfield; repaired and painted boats; built two dams for lake impoundments for aid in clearing lake.

**Croft:**

Painted first aid room; varnished all woodwork; repaired plumbing and light fixtures in bathhouse; painted swimming and wading pools; installed inlet water piping for circulation in swimming pool; built three new grills and fireplaces in No. 2 picnic area; built service bridge to No. 2 picnic area; built barbecue shelter and pit; put concrete floor in picnic shelter; paved gutter and walkway in front of pools; re-sloped and sodded bank in front of bathhouse; built concrete retaining wall.

**Edisto Beach:**

Completely overhauled pump and 15,000 gallon water tank; converted laundry room to lifeguard quarters; repainted first aid room; built two new boat docks; built four new boats.

**Givhans Ferry:**

Reroofed two family cabins, bathhouse, and recreation building; major repair to rest rooms; plumbing repairs to five cabins.

**Greenwood:**

Major repair to floating boat dock; painted and repaired boats; remodeled concession stand; built and installed several new picnic tables; extended electricity and developed parking area for No. 2 picnic area; rewired No. 1 picnic area; general repairs in colored area.



**Hunting Island:**

Complete renovation of water system including relocation of 3/4 mile of 4 inch pipe line; drilling two additional wells; tearing down and re-erecting 30,000 gallon water tank. Rewired all buildings and converting utilities for electricity.

**Kings Mountain:**

Major repairs to group camps; overhauled all water systems; graded and enlarged parking area at Camp Cherokee; top soiled and seeded flagpole area; repaired and painted boats and boat dock; painted interior of bathhouse; enlarged beach; repaired all plumbing and lighting fixtures in day use area; enlarged picnic area and built 3 new concrete picnic tables and fireplaces.

**Lee:**

Repainted picnic tables, boats and bathhouse interior; replaced water system at superintendent's residence; replaced two gates; reroofed toilets and bathhouse; winding footbridge replaced with modern culvert and fill.



Healthful outdoor recreation can be enjoyed at South Carolina's State Parks.



**Myrtle Beach:**

Reroofed superintendent's residence, garage, bunkhouse, park foreman's residence; five cabins jacked up, rotted sills and members replaced; modern flush latrine put in trailer cabin area; rewired bunkhouse and new power lines throughout park; linoleum in kitchens of five cabins.

**Oconee:**

Rebuilt showers in six cabins; major repairs to floors and sills in five cabins; general plumbing, screen and bed repairs in twenty cabins; screened porches of six cabins; repaired and painted picnic tables and boats; painted interior of bathhouse and kitchen in tea room; placed linoleum in kitchens of thirteen cabins; extended lights in picnic area; built two new pit latrines; re-roofed picnic shelter.

**Paris Mountain:**

Enlarged picnic area at Sulphur Springs; reconditioned all picnic tables and boats; repainted bathhouse interior; reconditioned swimming beach; put concrete floor in No. 4 picnic shelter; reroofed foreman's residence and overhauled all septic fields; general repair of water systems; general repair to all buildings in group camp.

**Poinsett:**

General repair of plumbing, lighting, screens, beds, etc., at Camp Burnt Gin and Mill Creek; major repairs to refrigerator at mess halls of both camps; built eight new dining tables and thirty-two benches for camps; overhauled all sewage systems; rebuilt garage-warehouse; rebuilt main boat dock of concrete; general painting and repairing of boats, picnic tables, and all fixtures of bathhouse and tea room.

**Rivers Bridge:**

Constructed new drinking fountain; replaced pump; diving towers and ladders installed at pool; built new service building and garage; poured concrete floor to pump house.



Relaxing at Santee State Park.

### **Santee:**

Wired picnic area and shelter; added six boats; repaired gate at dam; graded out swimming beach; started construction of assistant's residence; cleared additional picnic area; built water fountain and added picnic tables.

### **Sesqui-Centennial:**

Repaired and painted all bathhouse equipment, boats and picnic tables and bathhouse interior; painted interior of superintendent's and ranger's residences; repaired swimming docks and reconditioned beach; general plumbing and wiring repairs to all park buildings.

### **Table Rock:**

General repairs to screens, plumbing and wiring in all cabins and picnic areas; painted interiors of bathhouse and exterior of bathhouse; completed warehouse; remodeled foreman's residence and lifeguard quarters; graded, topsoiled and resanded beach; built direction water flow wall at beach; repaired and painted picnic tables and all boats.



## COOPERATIVE PROJECTS

The Myrtle Beach Fishing Pier introduces a recreation facility heretofore unknown to the State Parks. Built with financial assistance from Col. Elliott Springs, whose Spring Maid Beach adjoins the Park, the pier was opened with ceremonies in June (1950) and immediately proved attractive to fishermen and visitors.

Constructed of creosoted pilings and heart cypress decking, it extends oceanward for 600 feet before forming a T-head. An entrance building houses concession stand, warehouse, toilets and operator's sleeping quarters while on the T-head is a large weather shelter, 44x20 feet. The pier is lighted for night fishing.

It is estimated fishermen will use the pier about ten months out of the year, thus tending to increase the use during the so called "off season" of park activity. Fall fishing is very popular along the coast.

The construction and operating cost of the pier is a self-liquidating project.



The new 640-foot fishing pier at Myrtle Beach State Park has proved to be very popular.

Other assistance from individuals and agencies are evident at Croft State Park where the Rotary Club of Spartanburg gave a children's wading pool and other groups made possible paving, barbecue shed and concession stand improvements.

Through cooperation of Orangeburg County a new road system was built at Santee State Park, while from State Highway Department came assistance for hard-surfacing the roads and parking areas at Hunting Island, Oconee and Croft State Parks.

Also from the Highway Department came beach erosion control groins at Edisto and Hunting Island State Parks.



## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address or Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Negro Areas
AIKEN STATE PARK Windsor, S. C., RFD .....	x	x	x	x	x	x	x		x				x		x		
BARNWELL STATE PARK Blackville, S. C. ....	x	x	x	x	x	x	x				x		x		x		
CHERAW STATE PARK Cheraw, S. C. ....	x	x	x	x	x	x	x	x			x		x	x	x	x	x
CHESTER STATE PARK Chester, S. C. ....	x	x				x	x				x		x		x		
CROFT STATE PARK Spartanburg, S. C., RFD .....	x	x	x	x	x								x				
EDISTO BEACH STATE PARK Edisto Island, S. C. ....	x	x	x	x	x	x	x	x					x		x		
GIVHANS FERRY STATE PARK Ridgeville, S. C., RFD .....	x	x	x	x	x	x	x	x			x		x		x		
GREENWOOD STATE PARK Ninety Six, S. C., RFD .....	x	x				x	x						x		x		x
HUNTING ISLAND STATE PARK Frogmore, S. C. ....	x	x		x	x	x	x						x		x		x
KINGS MOUNTAIN STATE PARK Kings Creek, S. C., RFD .....	x	x		x	x	x	x						x		x	x	
LEE STATE PARK Bishopville, S. C., RFD .....	x	x	x	x	x	x	x		x		x		x		x		
MYRTLE BEACH STATE PARK Myrtle Beach, S. C. ....	x	x		x	x		x	x		x	x		x		x		
OCONEE STATE PARK Walhalla, S. C., RFD .....	x	x		x	x	x	x	x			x	x	x	x	x		
PARIS MOUNTAIN STATE PARK Greenville, S. C., RFD .....	x	x	x	x	x	x	x						x	x	x	x	
POINSETT STATE PARK Wedgefield, S. C. ....	x	x	x	x	x*	x	x	x				x	x		x	x	x
RIVERS BRIDGE CONFEDERATE MEMORIAL STATE PARK Ehrhardt, S. C., RFD .....	x	x		x	x	x	x						x		x		
SANTEE STATE PARK Elloree, S. C., RFD .....	x	x				x	x										
SESQUI-CENTENNIAL STATE PARK Columbia, S. C., RFD .....	x	x		x	x	x	x						x		x		
TABLE ROCK STATE PARK Pickens, S. C., RFD .....	x	x		x	x	x	x	x			x	x	x		x		

Note: For overnight camping, write in advance to Park Superintendent.

\* Where no regular Barbecue Pit and shelter are established temporary arrangements can be made at all Parks.





Square dancing is a popular activity at State Parks.

### CLARK HILL

Current progress in the two State Park areas—Baker Creek for white and Hickory Knob for colored—amounts to filing application with the U. S. Corps of Engineers for the leasing of the necessary lands for the two areas and another application with the U. S. Forest Service for certain of their holdings to round out the Baker Creek acreage. Agreements have also been made between the state and U. S. Corps of Engineers as to Master Plans of developments and listing initial facilities necessary prior to impounding the reservoir waters.

No state appropriation has yet been made for the commencement of activities in these areas.

### PARK FOR DILLON COUNTY

The 1949-50 General Assembly included in next year's appropriation an item of \$15,000 "to be used for the necessary construction and facilities at a State Park to be located in Dillon County".

Preliminary surveys have previously been made of possible sites in the Little Pee Dee area of Dillon County as well as the areas adjacent thereto.



## GROWTH OF THE STATE PARK SYSTEM

A compilation of attendance totals reveals that during the fourteen years of "open for business" over 12 million visitors have gone into the State Parks "for health and recreation". In the table below is listed the annual attendance count for the several years:

First Year	Attendance	
1936-37	48,885	Myrtle Beach (7-1 to 9-7), 42,488; Poinsett (8-5 to 9-7), 5,463; Aiken (8-19 to 9-7), 934.
1937-38	478,617	Aiken, Chester, Cheraw, Givhans Ferry, Edisto, Lee, Poinsett, Paris Mountain, Oconee, Table Rock, Myrtle Beach.
1938-39	494,850	
1939-40	584,150	Add: Kings Mountain, Sesqui-Centennial.
1940-41	830,156	Add: Hunting Island, Greenwood, Barnwell.
1941-42	1,053,057	Aiken, Barnwell, Chester, Cheraw, Edisto, Givhans, Ferry, Greenwood, Hunting Island, Kings Mountain, Lee, Myrtle Beach, Oconee, Paris Mountain, Poinsett, Sesqui-Centennial, Table Rock.
1942-43	531,415	(Santee acquired).
1943-44	546,165	
1944-45	545,906	Myrtle Beach to Army; Edisto Island to Coast Guard.
1945-46	808,207	Add: Rivers Bridge.
1946-47	1,241,000	
1947-48	1,562,260	
1948-49	1,383,779	
1949-50	2,089,712	Croft—opened; Santee—opened.
	12,198,157	



Family vacation cabins are located in 7 State Parks.



## VACATION ACCOMMODATIONS

### **Cabins:**

The seventy-nine State Park cabins at Table Rock, Oconee, Cheraw, Poinsett, Givhans Ferry, Myrtle Beach and Edisto Beach were reserved for the entire season by families on vacation. In addition, the off-season use of these facilities is steadily increasing and it is not unusual to find cabin users in the Parks from early spring until well into the winter months.

### **Group Camps:**

Organized camping groups continued to seek the facilities of our seven group camps at Paris Mountain, Kings Mountain, Cheraw and Poinsett, for their summer outings. Such groups as Boy and Girl Scouts, YW and YMCA's, church and school groups, and crippled children, held encampments of from one to eight weeks at these well-equipped group camp areas.

Mill Creek Camp on Manchester forest is limited to Negro groups, and enjoys good usage and is the scene of the annual Orthopedic Camp of the State Board of Health.

More and more use of the group camp areas is being made by schools. School camping on school time is a progressive teaching method and successfully done in such states as Michigan, New York and California. The State Parks are furnishing facilities for a beginning of this practice here. Other school groups are using the organized camp areas for indoctrinational courses.

### **Other Facilities:**

Refreshments stands are open in all State Parks during the vacation season, while at Oconee, Table Rock and Poinsett, are well-appointed tea rooms where delicious meals may be had. The tea rooms are also in demand by clubs and other groups for evening meals and meetings.

Fishing may be enjoyed at all State Parks. No charge for this recreational sport is imposed; however, boats are available at a rental fee. Established state game and fish laws are operative in the parks.

Large, well equipped buildings for use as community centers and recreation activities are available at Barnwell, Cheraw, Chester, Givhans Ferry, Lee, Myrtle Beach, Oconee and Table Rock.

These facilities make a year-round contribution to the social life of the young people of the countryside as well as serving as





Nature study trails in the state parks are used by groups and individuals

a meeting place for conventions, family reunions, day camp headquarters, and general group gatherings.

### **Negro Areas:**

Although we have State Park areas for Negroes established at Greenwood, Cheraw, Poinsett and Hunting Island, other areas are under consideration in order that increased facilities may be had for the colored people of the state. It is hoped that funds will be appropriated by the forthcoming legislature to build some of the permanent improvements needed at the present Parks, and for the acquisition of additional areas, as we consider this need of primary importance in our program.

### **RECOMMENDATIONS**

Our recommendations for the new year follow the same outline as submitted this year, as no funds were appropriated by the 1950 legislature for any of these improvements.

Our most important needs are (1) acquisition of three more areas for parks for Negroes and the expansion of existing facilities in established Negro Parks; (2) to begin impressive development of our two new parks and those older parks whose building was halted because of World War II.

S. C. STATE COMMISSION OF FORESTRY  
DIVISION OF STATE PARKS  
Summary of State Park Use, July 1, 1949 - June 30, 1950

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathroom Users	No. Out-of- State Cars	Total No. of Cars	No. Visitors Under 18	Total No. of Visitors
Aiken	.....	.....	1,047	11,762	7,170	3,750	623	6,928	9,551	19,755
Barnwell	.....	.....	592	20,848	6,469	3,100	546	10,997	11,127	33,857
Campbell's Pond (N)	.....	.....	197	1,403	4,067	1,450	500	2,193	3,780	9,363
Cheraw	.....	.....	2,543	30,475	63,435	28,205	15,210	36,029	67,557	141,910
Chester	278	1,770	.....	21,387	.....	.....	1,923	13,396	14,088	48,235
Croft	.....	.....	1,663	19,245	16,499	16,196	522	11,512	22,299	50,303
Edisto Beach	.....	.....	2,555	16,053	14,301	3,287	1,149	11,639	19,151	51,563
Givhans Ferry	317	1,438	319	11,540	5,330	1,153	116	8,639	9,692	28,356
Greenwood	277	1,336	1,930	41,995	.....	.....	375	23,585	23,945	92,975
Greenwood (N)	.....	.....	52	3,760	.....	.....	.....	930	1,870	4,085
Hunting Island	.....	.....	1,868	10,321	23,799	9,731	.....	16,905	13,615	62,093
Hunting Island (N)	.....	.....	308	1,547	1,298	.....	3,680	2,039	1,429	7,136
Kings Mountain	.....	.....	2,185	24,373	15,664	.....	266	30,022	56,328	126,352
Lee	.....	.....	592	16,343	11,004	3,066	16,189	10,816	13,799	37,863
Myrtle Beach	.....	.....	2,787	45,882	36,884	2,870	8,028	32,461	29,003	107,037
Oconee	1,630	8,580	3,575	19,685	27,858	8,485	673	23,212	7,303	95,905
Paris Mountain	1,075	6,558	6,361	79,311	18,130	16,905	3,448	61,798	78,292	275,670
Poinsett	.....	.....	3,588	43,241	19,470	15,835	2,350	20,518	32,517	91,936
Mill Creek (N)	452	3,255	527	11,378	8,273	8,211	11	2,882	5,588	16,929
Rivers Bridge	.....	.....	256	9,237	2,711	.....	385	8,914	11,160	24,322
Santee	.....	.....	349	3,823	1,097	.....	133	3,667	4,036	12,421
Sesqui-Centennial	.....	.....	14,831	210,201	169,004	13,258	9,397	86,352	183,325	480,127
Table Rock	.....	.....	4,621	58,273	40,674	8,972	4,266	48,781	75,339	190,815
Aiken Wayside	1,344	8,014	144	1,060	.....	.....	175	1,014	970	2,702
Colleton Wayside	.....	.....	1,543	8,388	.....	.....	5,709	11,332	17,833	57,297
Greenville Wayside	.....	.....	761	6,807	.....	.....	1,078	3,747	6,289	17,094
Greenwood Wayside	.....	.....	292	4,239	.....	.....	5	825	1,445	3,011
TOTALS	5,373	30,951	56,078	732,577	493,137	157,864	77,211	491,193	721,331	2,089,712



**APPENDIX**  
**FINANCIAL STATEMENT**  
**SOUTH CAROLINA STATE COMMISSION OF FORESTRY**  
**July 1, 1949 - June 30, 1950**

**RECEIPTS**

Division of Forestry:

Balance from 1948-49—Federal Fund.....\$	4,794.23	
Balance from 1948-49—Trust Fund.....	7,937.31	
Deficiency 1948-49 Appro. Carried Forward	7,492.21	
State Appropriation—Operating.....	669,387.00	
Federal Fund—Protection CM Law Sec. 2	320,191.00	
Federal Funds—Reforestation CM Law		
Sec. 4 & N-D.....	5,050.00	
Federal Funds—Farm Forestry.....	16,894.21	
Nursery .....	58,080.63	
State Forests.....	19,425.76	
Trust Fund—Aiken Forest.....	3,916.68	
Tractor Project (Firebreaks) .....	395.70	
Marking and Tallying Timber.....	5,910.37	
Miscellaneous .....	1,720.71	
Transferred from General Fund Revenue—		
Petty Cash .....	135.49	
		<hr/>
Total Receipts—Forestry.....		\$1,121,331.30
Less Receipts Deposited to Cr. State Revenue Account....		89,238.91
		<hr/>
Total Receipts Available for Expenditure.....		\$1,032,092.39
Total Expenditures.....		1,023,944.14
		<hr/>
Balance—Division of Forestry.....		\$ 8,148.25*

Division of State Parks:

Balance from 1948-49 (Deposits—Hunting		
Island) .....	\$ 4,729.15	
State Appropriation—Operating .....	246,398.00	
Rivers Bridge Mem. Association.....	7,500.00	
Ft. Watson Memorial Area.....	1,500.00	
Suppl. State Appropriation from 1947-48—		
Ear Marked .....	8,749.01	
Suppl. State Appropriation from 1948-49....	20,000.00	
Suppl. State Appropriation 1949-50.....	5,000.00	
Allotment—Civil Contg. Fund for Rivers		
Bridge MA.....	4,800.00	
Forests & Parks Fund (Hunting Island		
Deposits) .....	2,425.00	
Transferred from Gen. Revenue Fund—		
Petty Cash.....	24.43	
Cabin Rentals.....	21,647.84	
Concession Stands .....	8,176.26	
Bathhouse Receipts.....	30,956.72	
Boat Rentals.....	4,058.70	
Picnic Shelters & Recreational Bldgs.....	868.00	
Group Camps.....	8,869.16	
Myrtle Beach Fishing Pier.....	1,572.17	
Miscellaneous Receipts .....	2,160.69	
		<hr/>
Total Receipts—Parks .....		\$ 379,435.13

Less Receipts Deposited to Cr. State Revenue Account....	76,737.37
Total Receipts Available for Expenditure.....	\$ 302,697.76
Total Expenditures .....	296,526.38
Balance—Division of State Parks.....	\$ 6,171.38**

**EXPENDITURES**

Administrative and Technical .....	\$ 251,656.87	
State Forest Nursery.....	66,604.29	
State Forest Projects.....	45,081.89	
County Forest Project.....	2,318.74	
Fire Protection.....	631,089.65	
Farm Forestry Projects.....	27,057.21	
Refunds—Petty Cash.....	135.49	
Total—Division of Forestry .....		1,023,944.14
Total—Division of State Parks.....		295,359.25
Grand Total—Expenditures.....		\$1,319,303.39

**RECAPITULATION****Funds Available:**

Division of Forestry.....	\$1,032,092.39	
Division of State Parks.....	302,697.76	
		\$1,334,790.15

**Expenditures:**

Division of Forestry.....	\$1,023,944.14	
Division of State Parks.....	296,526.38	
		— 1,320,470.52

\$ 14,319.63\*\*\*

* Aiken Forest Trust Fund.....	\$ 8,148.25
** Hunting Island Deposits.....	5,766.34
** Myrtle Beach Fishing Pier.....	405.04

\$14,319.63\*\*\*

NOTE: In addition to above a fishing pier at Myrtle Beach State Park was constructed at a cost of \$36,767.77. Funds in this amount were borrowed from Springs Cotton Mill as authorized by 1949 General Assembly.



TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1949-50

UNIT	Organized Personnel							Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Members, Retainer Crews	Members, Flexible Crews	Total	Volunteer, FFFS Crews	Other Volunteers	
Abbeville .....	1	2	....	1	....	3	7	35	....	42
Aiken .....	1	4	2	....	....	12	24	32	....	56
Allendale .....	1	2	1	3	....	9	16	106	....	122
Anderson .....	1	2	....	3	....	4	10	120	....	130
Bamberg .....	1	2	1	2	....	7	13	66	....	79
Barnwell .....	1	2	1	3	....	11	18	90	....	108
Beaufort .....	2	2	1	3	....	7	15	18	259	292
Berkeley .....	1	4	1	4	....	17	27	36	1,767	1,830
Calhoun .....	1	2	1	2	....	5	11	11	....	22
Charleston .....	1	4	1	2	....	8	16	15	640	671
Cherokee .....	1	1	....	1	....	3	6	176	....	182
Chester .....	1	3	....	1	....	9	14	28	....	42
Chesterfield .....	1	3	1	4	....	5	14	49	359	422
Clarendon .....	1	3	1	3	....	18	26	88	640	754
Colleton .....	1	4	2	5	....	5	17	89	1,769	1,875
Darlington .....	1	2	1	3	....	11	18	32	....	50
Dillon .....	1	2	1	2	....	8	14	20	....	34
Dorchester .....	1	3	1	3	....	6	14	38	319	371
Edgefield .....	1	2	....	1	....	....	4	22	....	26
Fairfield .....	1	4	....	3	43	....	51	59	....	110
Florence .....	1	4	1	4	....	16	26	36	....	62
Georgetown .....	1	4	2	4	3	12	26	60	1,588	1,674
Greenville .....	1	3	....	4	....	3	11	99	....	110
Greenwood .....	1	2	....	2	....	2	7	59	....	66
Hampton .....	1	3	1	3	....	5	13	27	487	527
Horry .....	1	5	2	4	....	7	19	60	....	79
Jasper .....	1	3	1	2	....	4	11	16	656	683
Kershaw .....	1	3	2	6	....	7	19	41	595	655
Lancaster .....	1	3	1	2	....	....	7	42	414	463
Laurens .....	1	3	....	2	....	3	9	30	....	39
Lee .....	1	2	1	3	....	9	16	30	386	432
Lexington .....	1	3	2	5	....	5	16	64	....	80
Marion .....	1	3	1	3	....	5	13	37	....	50
Marlboro .....	1	3	1	3	....	4	12	31	....	43
McCormick .....	1	1	....	....	....	....	2	20	....	22
Newberry .....	1	2	....	2	....	4	9	24	....	33
Oconee .....	1	2	....	2	....	10	15	137	....	152
Orangeburg .....	1	5	2	5	....	22	35	102	....	137
Pickens .....	1	3	....	4	....	7	15	98	....	113
Richland .....	1	5	1	4	....	5	16	40	474	530
Saluda .....	1	2	....	1	....	3	7	22	....	29
Spartanburg .....	1	3	....	4	....	8	16	54	....	70
Sumter .....	1	3	1	3	....	10	18	43	638	699
Union .....	1	2	....	1	....	7	11	135	....	146
Williamsburg .....	1	5	2	4	....	16	28	176	1,147	1,351
York .....	1	2	....	4	....	11	18	200	....	218
TOTALS .....	47	132	37	135	46	333	730	2,813	12,138	15,681

TABLE 2—EDUCATIONAL WORK—PROTECTIVE ORGANIZATIONS—FISCAL YEAR 1949-50

UNIT	Rangers and Wardens										Tower-men
	Visits to Sawmills	Brush Burning Inspections	Notices Posted	Literature Distributed	People Interviewed	Talks at Schools	Forestry Picture Shows	News Releases	Fire Law Prosecutions	Fire Law Convictions	
Abbeville	15	11	2,067	11,372	1,436	4	9	4	3	3	157
Aiken	3	5	746	1,269	125	14	6	1	6	5	408
Allendale	25	209	670	1,204	254	12	1	27	10	10	178
Anderson	16	.....	300	2,700	3,140	22	.....	7	3	3	1,135
Bamberg	16	6	670	1,264	121	9	6	12	2	2	169
Barnwell	33	235	670	1,264	575	26	1	1	7	7	503
Beaufort	7	110	156	1,447	1,102	14	4	14	7	6	183
Berkeley	27	89	1,796	13,603	197	19	17	15	16	10	248
Calhoun	4	10	670	1,264	148	16	1	1	6	6	67
Charleston	18	222	121	3,572	1,113	12	1	32	5	5	455
Cherokee	5	17	580	11,450	135	.....	.....	13	9	8	1,275
Chester	1	38	442	1,542	1,137	31	12	11	10	10	2,676
Chesterfield	83	67	475	7,321	465	5	4	28	18	16	809
Clarendon	21	55	1,513	17,397	1,435	15	15	5	27	25	376
Colleton	19	365	254	1,918	1,378	8	3	10	7	7	1,780
Darlington	6	3	82	3,762	2,020	3	10	14	9	8	655
Dillon	7	35	284	1,851	1,023	17	6	9	15	13	107
Dorchester	61	90	106	1,212	601	6	1	6	2	2	185
Edgefield	10	6	383	2,520	526	42	8	9	8	8	105
Fairfield	17	2	71	3,228	697	50	12	11	11	11	144
Florence	30	53	188	2,619	2,072	10	12	7	20	17	348
Georgetown	.....	4	1,639	16,826	282	8	5	4	12	11	35
Greenville	.....	6	179	5,439	1,012	.....	2	27	26	24	2,750
Greenwood	8	10	219	3,210	203	18	8	7	8	7	644
Hampton	17	74	194	8,146	424	20	1	39	15	15	983
Horry	1	30	15	675	33	15	6	4	53	54	298
Jasper	6	91	180	1,300	534	9	1	6	.....	.....	148
Kershaw	35	10	149	11,381	463	19	22	10	16	16	2,098
Lancaster	8	47	354	9,157	2,694	13	5	.....	15	15	1,431
Laurens	11	109	236	2,160	440	3	4	4	2	2	722
Lee	36	66	74	9,237	1,628	25	19	16	31	31	715
Lexington	6	33	725	1,269	284	23	5	6	10	10	620
Marion	6	9	239	3,274	964	12	13	8	20	17	175
Marlboro	12	41	166	3,053	1,253	12	13	7	16	10	260
McCormick	15	.....	1,508	5,750	72	.....	6	13	4	4	.....
Newberry	6	4	84	2,236	703	23	9	15	8	8	486
Oconee	12	27	169	4,301	2,099	16	5	7	9	6	1,536
Orangeburg	5	9	760	1,269	184	35	7	7	38	38	1,106
Pickens	20	6	166	2,217	1,117	.....	1	15	4	4	1,181
Richland	41	30	121	4,492	914	45	7	.....	7	3	3,842
Saluda	1	33	193	2,961	2,817	45	7	8	4	4	18
Spartanburg	12	12	124	5,480	1,061	.....	2	30	5	3	2,551
Sumter	47	202	77	2,308	693	37	16	46	17	17	825
Union	31	41	1,150	14,678	1,367	18	12	37	9	8	48
Williamsburg	6	12	1,616	17,639	1,724	18	17	5	34	29	353
York	3	10	113	5,467	1,068	6	.....	22	6	5	805



TABLE 3—SUMMARY OF FIRES BY MONTHS—JULY 1, 1949 - JUNE 30, 1950

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	59	0.7	318.7	5.4
August .....	15	0.2	108.9	7.3
September .....	31	0.4	91.8	3.0
October .....	65	0.7	225.1	3.5
November .....	465	5.5	6,448.5	13.9
December .....	840	10.0	14,492.9	17.3
January .....	1,737	20.6	43,847.7	25.2
February .....	2,210	26.2	74,273.6	33.6
March .....	1,075	12.8	31,061.9	28.9
April .....	1,642	19.5	65,953.6	40.2
May .....	175	2.1	2,298.6	13.1
June .....	110	1.3	1,383.0	12.6
TOTALS .....	8,424	100.0	240,504.3	28.5

TABLE 4—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1949-50

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Unknown		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	...	...	6	17.4	1	2.4	18	86.2	8	39.6	2	60.0	1	4.8	4	56.7	...	...	40	267.1
Aiken	...	...	18	227.0	33	497.7	97	2,996.7	46	1,146.6	108	1,863.8	9	202.8	24	673.8	...	...	335	7,614.4
Allendale	...	...	9	320.6	3	15.5	28	188.9	41	831.5	181	1,853.9	3	23.0	3	43.0	...	...	268	3,276.4
Anderson	...	...	4	35.3	9	247.0	22	254.3	52	421.5	6	34.7	...	...	5	79.1	3	18.8	101	1,090.7
Bamberg	...	...	...	...	2	5.0	27	207.0	46	418.0	27	1,291.5	6	58.5	12	137.7	41	576.0	161	2,693.7
Barnwell	...	...	6	27.0	...	...	214	2,131.4	35	272.4	12	138.2	2	9.0	3	111.0	...	...	272	2,689.0
Beaufort	...	...	1	1.0	23	527.6	17	176.8	39	639.5	87	2,354.9	2	7.0	6	228.0	...	...	178	4,033.9
Berkeley	...	...	1	108.0	4	102.5	53	1,506.2	9	335.2	568	23,065.2	8	421.0	31	982.6	1	1.0	675	26,521.7
Calhoun	...	...	...	...	...	...	60	362.3	4	16.5	26	275.3	...	...	7	20.7	...	...	99	729.8
Charleston	...	...	2	55.0	...	...	38	401.2	33	279.2	188	5,871.2	11	80.3	2	6.0	...	...	280	6,873.7
Cherokee	...	...	4	152.8	...	...	16	142.0	11	126.3	3	93.5	...	...	6	12.9	...	...	42	393.2
Chester	...	...	3	12.6	2	0.8	10	32.5	11	36.7	4	104.0	1	19.2	2	18.0	...	...	35	268.7
Chesterfield	...	...	1	2.0	3	46.0	15	196.4	19	2,965.3	33	2,543.8	3	84.0	23	727.8	2	105.0	100	6,610.4
Clarendon	...	...	...	...	2	30.0	37	493.7	43	331.8	130	7,864.3	4	104.5	12	1,294.4	2	100.0	202	10,657.5
Colleton	...	...	1	15.0	7	214.1	32	423.3	96	2,497.9	35	527.5	...	...	6	59.0	3	118.0	353	8,387.6
Darlington	...	...	3	34.5	18	285.8	51	527.0	56	989.8	35	1,089.1	7	102.5	7	288.5	6	8.0	177	2,661.6
Dillon	...	...	6	19.3	7	472.0	26	159.0	42	796.1	48	1,667.5	...	...	3	18.4	...	...	134	3,153.9
Dorchester	...	...	...	...	2	13.0	29	595.0	38	1,786.0	57	1,667.5	1	10.0	2	8.0	...	...	132	4,210.5
Edgefield	...	...	1	27.0	...	...	11	82.2	17	275.6	2	17.5	3	23.4	5	50.4	...	...	39	476.1
Fairfield	...	...	22	405.8	2	19.0	35	857.1	16	156.0	10	192.3	8	55.5	5	167.0	...	...	98	1,852.7
Florence	...	...	2	309.0	6	91.7	75	1,776.3	102	3,667.7	185	7,727.6	4	64.6	8	125.6	2	12.7	384	13,775.2
Georgetown	...	...	3	34.6	1	4.0	11	152.1	26	2,206.6	257	12,025.7	6	201.4	9	274.0	...	...	313	14,898.4
Greenville	...	...	...	...	3	...	55	181.1	20	62.0	28	261.6	3	24.1	17	77.9	...	...	127	626.1
Hampton	...	...	17	178.8	4	34.6	25	519.3	14	236.2	...	...	5	53.2	5	117.6	10	178.8	80	1,318.5
Horry	...	...	2	35.0	1	19.0	2	3.5	9	103.0	81	3,720.1	2	47.8	9	207.0	...	...	109	4,192.4
Jasper	...	...	8	111.1	7	68.2	124	5,897.5	136	6,491.8	127	10,285.4	9	208.5	50	2,582.9	10	410.1	475	26,053.3
Kershaw	...	...	2	17.5	2	49.0	16	296.0	34	931.8	130	7,864.3	4	104.5	12	1,294.4	2	100.0	202	10,657.5
Lancaster	...	...	8	105.9	...	...	42	673.4	22	1,651.0	31	733.8	...	...	1	0.5	...	...	104	2,564.6
Laurens	...	...	1	0.5	...	...	17	78.7	21	131.1	4	22.5	...	...	12	392.3	...	...	55	625.1
Lee	...	...	4	19.4	10	168.4	52	450.1	23	203.2	11	471.0	...	...	2	37.4	...	...	102	1,349.5
Lexington	...	...	...	...	1	2.2	25	659.3	12	275.0	21	388.9	5	74.3	10	467.7	...	...	74	1,867.4
	1	4.0	4	417.5	17	293.5	28	337.0	37	572.5	16	470.9	1	3.2	19	594.5	...	...	123	2,698.1



Marion	.....	3	93.0	6	46.6	37	504.7	33	659.4	100	3,930.8	1	0.1	7	75.1	3	64.5	190	5,374.2
Marlboro	.....	3	40.7	4	447.4	27	794.0	28	328.3	144	3,442.8	3	12.3	8	298.6	6	213.0	223	5,577.1
McCormick	.....	24	170.4	1	5.5	20	155.3	16	1,844.8	.....	.....	3	2,161.6	8	141.0	2	10.5	74	4,489.1
Newberry	.....	1	14.0	.....	.....	10	174.8	12	86.5	.....	.....	.....	.....	3	26.0	12	256.5	38	557.8
Oconee	.....	10	40.0	.....	.....	15	90.1	26	654.3	10	82.8	2	5.8	3	36.5	.....	.....	68	909.5
Orangeburg	.....	2	52.7	3	50.0	33	437.8	48	2,651.3	850	23,187.1	9	124.0	8	177.9	.....	.....	953	26,680.8
Pickens	.....	.....	.....	.....	.....	11	14.7	15	44.4	2	4.0	1	1.0	5	25.3	.....	.....	35	89.5
Richland	.....	15	365.4	3	924.7	74	1,044.8	30	239.6	79	908.9	.....	.....	12	42.4	3	23.7	217	3,551.5
Saluda	.....	.....	.....	1	2.0	6	12.3	14	205.6	4	105.1	3	9.5	4	9.7	6	90.6	38	434.8
Spartanburg	.....	6	50.0	4	52.0	18	655.7	13	133.3	2	78.0	.....	.....	13	203.8	1	2.0	58	1,175.8
Sumter	.....	2	6.0	4	61.0	61	893.3	32	648.6	65	1,239.1	4	50.0	6	159.8	5	162.0	179	3,219.8
Union	.....	12	63.3	2	1.7	12	99.7	15	223.9	5	39.6	1	3.0	7	16.8	7	143.1	61	591.1
Williamsburg	.....	6	417.6	8	380.4	24	147.4	73	3,559.4	115	7,566.6	2	160.0	6	302.6	2	95.0	238	12,646.0
York	.....	7	79.1	.....	.....	24	146.7	42	374.6	4	39.2	.....	.....	3	22.5	17	81.3	97	743.4
TOTALS	.....	236	4,114.6	212	5,298.6	1,680	28,014.8	1,515	42,290.3	4,059	140,994.8	138	5,036.9	414	11,577.4	152	2,991.7	8,424	240,504.3





Marion .....	27	5.8	87	1.9	68	2.4	7	1.9	1	2.1	190	2.3
Marlboro .....	17	3.6	131	2.8	59	2.0	16	4.4	.....	.....	223	2.6
McCormick .....	.....	.....	59	1.3	12	0.4	.....	.....	3	6.4	74	0.9
Newberry .....	.....	.....	22	0.5	16	0.6	.....	.....	.....	.....	38	0.4
Oconee .....	.....	.....	56	1.2	10	0.3	.....	.....	.....	.....	68	0.8
Orangeburg .....	1	0.2	440	9.4	457	15.9	47	12.8	2	4.3	953	11.3
Pickens .....	7	1.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richland .....	3	0.6	30	0.6	2	0.1	.....	.....	.....	.....	35	0.4
Saluda .....	13	2.9	150	5.2	50	1.7	3	0.8	1	2.1	217	2.6
Spartanburg .....	1	0.2	29	0.6	8	0.3	.....	.....	.....	.....	38	0.4
Sumter .....	1	0.2	37	0.8	19	0.7	1	0.3	.....	.....	58	0.7
Union .....	5	1.1	96	2.1	76	2.6	2	0.5	.....	.....	179	2.1
Williamsburg .....	1	0.2	44	0.9	16	0.6	.....	.....	.....	.....	61	0.7
York .....	22	4.7	92	2.0	86	3.0	36	9.9	2	4.2	238	2.8
.....	2	0.4	75	1.6	20	0.7	.....	.....	.....	.....	97	1.2
TOTALS .....	469	100.0	4,669	100.0	2,872	100.0	367	100.0	47	100.0	8,424	100.0

TABLE 6—SUMMARY OF FIRES BY COUNTIES AND MONTHS—FISCAL YEAR 1949-50

UNIT	July 1949		Aug. 1949		Sept. 1949		Oct. 1949		Nov. 1949		Dec. 1949		Jan. 1950		Feb. 1950		Mar. 1950		April 1950		May 1950		June 1950	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	7	12.0	...	...	1	4.8	...	...	7	28.3	5	22.1	2	20.8	4	5.8	7	79.0	12	75.9	2	30.4	...	...
Aiken	...	...	...	...	29	72.9	19	92.6	29	72.9	19	92.6	54	305.3	84	1,166.0	56	1,048.0	62	4,692.7	9	123.7	...	70.1
Allendale	5	23.0	...	...	1	1.5	1	9.6	24	484.0	46	196.3	76	1,053.2	58	675.6	23	481.2	35	286.6	4	88.4	...	...
Anderson	...	...	...	...	...	...	...	...	5	0.2	6	14.1	...	...	17	146.2	20	137.9	46	755.9	1	2.4	...	...
Bamberg	1	1.0	1.0	...	...	...	...	...	9	47.0	31	1,314.7	41	463.5	60	763.0	6	39.5	11	80.0	...	...	...	4.0
Barnwell	3	5.2	...	...	...	...	...	...	18	174.1	43	358.0	55	604.7	54	698.2	33	372.0	58	452.3	4	14.0	1	6.0
Beaufort	...	...	...	...	...	...	...	...	11	82.8	15	208.1	37	606.7	60	1,315.2	27	1,089.1	23	664.0	...	...	5	68.0
Berkeley	4	0.5	1	4.2	...	5.0	...	...	16	84.4	76	1,825.6	158	4,038.1	184	7,782.0	86	4,073.4	132	8,487.2	11	161.5	5	51.8
Calhoun	1	12.0	...	...	...	...	2	2.5	8	28.5	9	41.5	21	121.5	19	103.0	15	63.5	19	344.7	4	11.0	1	1.6
Charleston	2	1.1	...	...	...	...	4	12.0	10	94.3	41	317.8	52	1,613.4	90	3,621.2	20	311.2	54	878.9	3	8.8	4	15.0
Cherokee	...	...	...	...	...	2.0	...	...	4	12.5	2	5.9	1	1.0	3	4.0	20	202.4	11	165.4	...	...	...	...
Chester	...	...	...	...	2	...	...	...	2	8.5	2	30.5	2	0.3	3	38.0	8	30.5	15	150.4	1	0.5	...	10.0
Chesterfield	...	...	...	...	...	...	...	...	2	19.5	2	25.0	10	220.5	35	1,670.4	19	1,474.0	20	3,038.9	6	24.1	5	129.0
Clarendon	3	2.2	...	...	...	...	...	...	12	180.4	36	671.8	98	3,479.3	83	4,403.6	28	797.2	25	482.2	2	15.0	1	1.0
Colleton	...	...	...	...	...	...	...	...	30	84.4	29	372.1	77	1,191.0	122	3,383.9	39	918.5	50	2,233.6	3	193.0	3	11.1
Darlington	...	...	...	...	4	14.4	...	...	16	130.4	13	109.3	38	480.7	33	248.4	29	1,039.5	30	532.2	5	93.0	3	5.4
Dillon	...	...	...	...	2	1.3	...	...	5	143.6	12	98.1	25	333.3	33	1,059.7	11	166.8	37	1,330.4	3	11.7	...	...
Dorchester	...	...	...	...	...	...	...	...	2	25.0	20	289.0	45	1,159.0	38	1,553.5	11	617.5	15	561.5	...	...	...	...
Edgefield	1	2.3	...	...	...	...	...	...	5	48.0	4	17.3	3	31.3	5	49.5	6	37.7	9	229.9	3	58.9	2	1.1
Fairfield	...	...	...	...	...	...	...	...	9	99.0	6	30.5	7	160.3	8	61.0	14	152.5	20	1,136.1	6	18.1	12	131.7
Florence	1	0.1	...	...	...	...	...	...	16	431.1	40	1,025.6	119	5,902.1	100	3,554.4	42	1,031.3	55	1,748.0	1	28.0	3	32.1
Georgetown	2	27.0	...	...	...	18.2	...	...	16	197.8	17	131.7	53	1,642.3	114	8,773.8	38	987.0	61	2,773.2	7	328.0	5	37.6
Greenville	...	...	...	...	...	...	...	...	9	8.4	4	12.4	2	1.2	13	45.7	32	164.7	58	385.2	7	7.5	2	1.0
Greenwood	1	4.0	...	...	...	0.5	...	...	11	153.3	10	126.0	3	7.6	6	61.8	13	266.4	31	689.7	2	2.2	1	3.0
Hampton	2	7.0	...	...	...	19.0	...	...	3	47.0	7	70.6	36	691.0	39	2,854.5	10	370.5	9	79.8	2	53.0	...	...
Horry	1	0.1	...	...	3	9.3	...	...	31	565.2	50	1,155.7	93	4,065.2	108	4,471.1	41	3,815.2	106	11,571.0	29	284.8	11	105.7
Jasper	...	...	...	...	...	...	...	...	5	25.3	19	624.3	63	1,618.8	62	6,015.0	25	1,370.9	18	844.5	2	10.0	5	132.5
Kershaw	1	0.5	...	...	...	0.5	...	...	3	46.0	4	13.2	11	226.2	24	288.7	19	910.2	32	934.6	7	14.2	...	...
Lancaster	3	8.1	...	...	...	...	...	...	1	0.5	1	6.0	5	48.8	8	11.7	15	323.0	16	219.5	3	1.0	...	...
Laurens	...	...	...	...	...	...	...	...	6	48.8	4	16.0	7	41.9	18	110.0	21	125.6	42	989.8	2	12.0	...	...
Lee	1	3.0	...	...	...	...	...	...	5	74.4	4	40.5	10	257.2	19	444.2	12	152.2	15	711.3	5	127.1	1	5.0
Lexington	6	13.0	...	...	...	...	...	...	12	54.5	7	69.4	16	125.2	31	536.0	13	731.0	30	1,153.4	5	12.6	2	2.0
Marion	...	...	...	...	...	...	...	...	5	1,557.9	16	170.5	52	547.1	61	1,817.8	20	215.9	29	1,056.1	2	1.1	1	3.2



Marlboro	1	3.0	1	130.2	16	296.0	52	485.4	68	1,303.0	42	1,448.3	28	1,632.8	6	198.1	2	77.7
McCormick	1	15.0	1	64.4	8	28.6	4	60.0	11	31.6	8	169.2	26	4,124.8	2	7.5	2	2.0
Newberry	1	15.0	1	38.0	4	25.0	3	23.0	5	110.0	8	127.3	12	217.0	1	1.8	1	1.8
Oconee	1	15.0	1	27.1	138	3,437.2	276	8,178.9	304	8,600.1	15	64.5	37	726.2	1	58.0	4	67.6
Orangeburg	1	15.0	1	324.6	1	3,437.2	276	8,178.9	304	8,600.1	80	2,704.1	109	3,296.9	3	6.1	4	6.1
Pickens	1	15.0	1	4.5	1	3,437.2	276	8,178.9	304	8,600.1	8	8.4	19	64.5	4	4.4	6	4.4
Richland	1	15.0	1	26.1	21	204.8	33	213.8	54	567.5	30	743.9	42	1,689.0	2	62.9	6	62.9
Saluda	1	15.0	1	17.2	3	19.2	1	0.6	7	95.7	6	237.5	13	60.7	1	3.9	2	3.9
Spartanburg	1	15.0	1	43.4	3	3.4	3	35.5	7	80.4	16	142.2	23	869.5	1	0.4	1	0.4
Sumter	1	15.0	1	250.8	16	150.9	27	616.2	44	899.6	29	483.4	30	496.5	6	56.4	5	56.4
Union	1	15.0	1	9.4	3	27.8	3	15.4	11	89.9	12	213.0	25	230.1	2	1.5	1	1.5
Williamsburg	1	15.0	1	436.3	22	756.3	56	3,118.3	75	4,571.1	27	1,031.5	39	2,379.7	5	80.3	3	80.3
York	1	15.0	1	7.7	7	41.5	6	38.4	17	102.4	15	113.3	43	431.0	3	8.5	1	8.5
TOTALS	59	318.7	15	6,448.5	840	14,492.9	1,737	43,847.7	2,210	74,273.6	1,075	31,061.9	1,642	65,953.6	175	2,298.6	110	1,383.0

TABLE 7—CLASSIFICATION BY CAUSES—FISCAL YEAR 1949-50

CAUSES	Number of Fires	Percent Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	18	0.2	185.2	10.3
Railroads .....	236	2.8	4,114.6	17.4
Campers .....	212	2.5	5,298.6	25.0
Smokers .....	1,680	19.9	28,014.8	16.7
Debris Burning .....	1,515	18.0	42,290.3	27.9
Incendiary .....	4,059	48.2	140,994.8	34.7
Lumbering .....	138	1.7	5,036.9	36.5
Miscellaneous .....	414	4.9	11,577.4	28.0
Unknown .....	152	1.8	2,991.7	19.7
TOTALS .....	8,424	100.0	240,504.3	28.5

TABLE 8—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1945-46	1946-47	1947-48	1948-49	1949-50	Average for 5-year period
Lightning .....	0.3	0.2	1.2	0.4	0.2	0.4
Railroads .....	8.3	7.1	7.0	5.2	2.8	5.5
Campers .....	2.7	3.4	2.8	2.5	2.5	2.8
Smokers .....	29.7	27.7	31.2	27.3	19.9	25.8
Debris Burning .....	19.8	20.4	19.5	20.2	18.0	19.4
Incendiary .....	27.1	27.7	28.5	35.6	48.2	35.9
Lumbering .....	1.7	2.0	1.7	1.3	1.7	1.5
Miscellaneous .....	4.9	6.8	5.9	6.0	4.9	5.7
Unknown .....	5.5	4.7	2.2	1.5	1.8	3.0



TABLE 9—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1949-50

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	40	267.1	0.16	6.7
Aiken .....	450,200	335	7,614.4	1.69	22.7
Allendale .....	131,400	268	3,276.4	2.49	12.2
Anderson .....	173,700	101	1,090.7	0.63	10.8
Bamberg .....	126,000	161	2,693.7	2.14	16.7
Barnwell .....	147,800	272	2,689.0	1.82	9.9
Beaufort .....	188,400	178	4,033.9	2.14	22.7
Berkeley .....	398,974	675	26,521.7	6.65	39.2
Calhoun .....	123,500	99	729.8	0.59	7.3
Charleston .....	271,994	280	6,873.7	2.53	24.5
Cherokee .....	127,800	42	393.2	0.31	9.3
Chester .....	260,023	35	268.7	0.10	7.7
Chesterfield .....	310,000	100	6,610.4	2.13	66.1
Clarendon .....	228,500	288	10,032.7	4.39	34.8
Colleton .....	465,000	253	8,387.6	1.80	23.8
Darlington .....	208,500	177	2,661.6	1.28	15.0
Dillon .....	144,100	134	3,153.9	2.19	23.5
Dorchester .....	268,200	132	4,210.5	1.57	31.9
Edgefield .....	172,641	39	476.1	0.28	12.2
Fairfield .....	338,957	98	1,852.7	0.55	18.9
Florence .....	293,900	384	13,775.2	4.69	35.8
Georgetown .....	415,600	313	14,898.4	3.58	47.6
Greenville .....	267,800	127	626.1	0.23	4.9
Greenwood .....	198,913	80	1,318.5	0.66	16.4
Hampton .....	239,500	109	4,192.4	1.75	38.4
Horry .....	577,600	475	26,053.3	4.67	54.8
Jasper .....	280,000	202	10,657.5	3.81	52.8
Kershaw .....	336,500	104	2,564.6	0.76	24.7
Lancaster .....	199,400	55	625.1	0.31	11.3
Laurens .....	244,735	102	1,349.5	0.55	13.2
Lee .....	110,600	74	1,867.4	1.69	25.2
Lexington .....	291,500	123	2,698.1	0.93	21.9
Marion .....	224,700	190	5,374.2	2.39	28.2
Marlboro .....	150,600	223	5,577.1	3.70	25.0
McCormick .....	144,840	74	4,489.1	3.10	60.7
Newberry .....	205,003	38	557.8	0.27	14.7
Oconee .....	259,252	68	909.5	0.35	13.3
Orangeburg .....	318,800	953	26,680.8	8.37	28.0
Pickens .....	190,100	35	89.5	0.05	2.6
Richland .....	289,500	217	3,551.5	1.23	16.4
Saluda .....	149,956	38	434.8	0.29	11.4
Spartanburg .....	208,300	58	1,175.8	0.56	20.2
Sumter .....	205,400	179	3,219.8	1.57	18.0
Union .....	157,894	61	591.1	0.37	9.7
Williamsburg .....	429,800	238	12,646.0	2.94	53.1
York .....	226,300	97	743.4	0.33	7.7
TOTALS .....	11,800,008	8,424	240,504.3	2.12	28.5

TABLE 10—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1945-46 .....	7,555,306	2,904	61,203.2	.81	21.1
1946-47 .....	11,655,623	6,601	232,040.2	1.99	35.2
1947-48 .....	11,542,170	3,149	46,959.8	.41	14.9
1948-49 .....	11,789,643	5,166	91,668.2	.78	17.7
1949-50 .....	11,300,008	8,424	240,504.3	2.13	28.5



TABLE 11—SEEDLING DISTRIBUTION BY COUNTIES, SPECIES AND AMOUNTS—1949-50

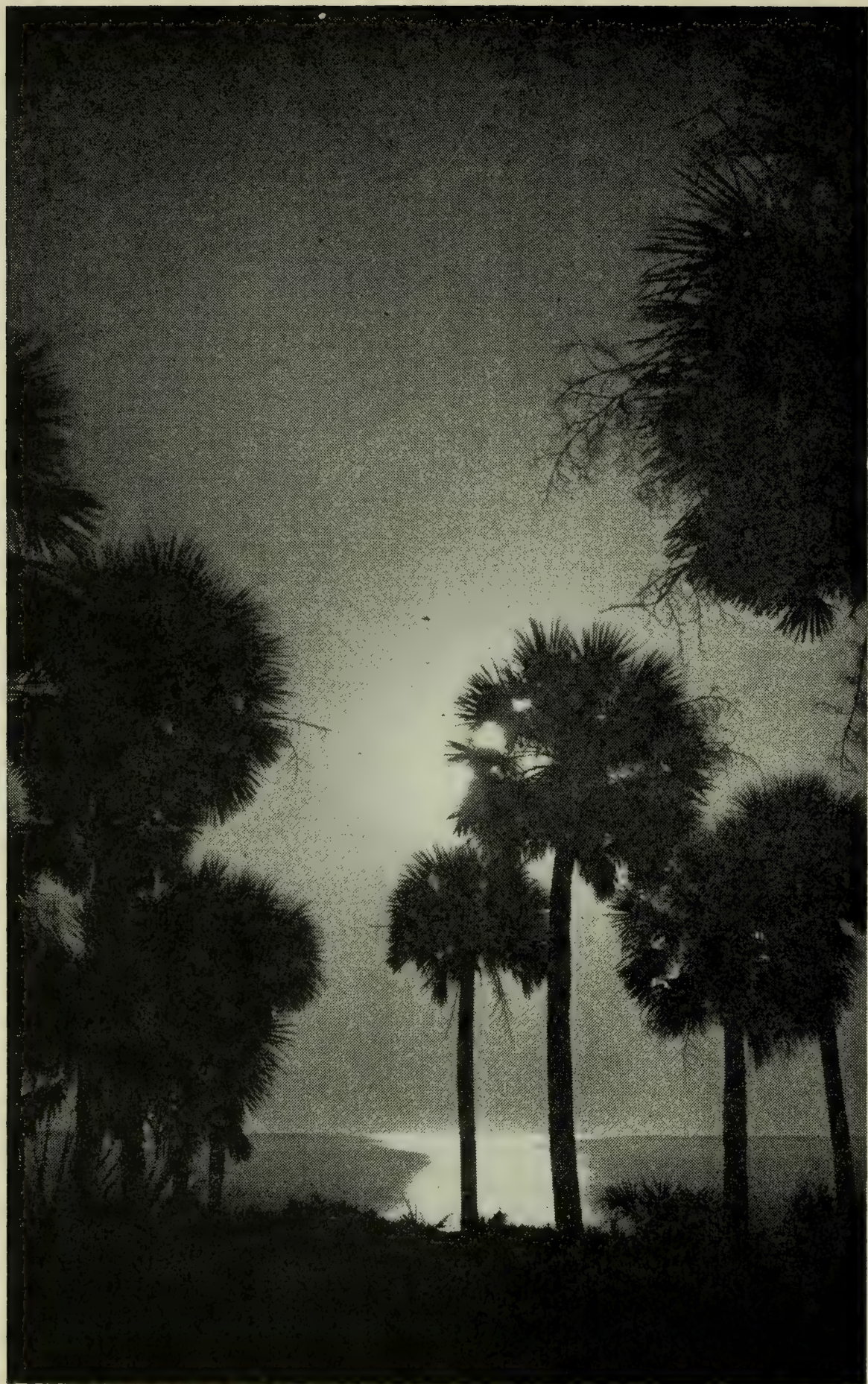
COUNTY	Slash	Loblolly	Longleaf	Spruce	Pine of India	Total
Abbeville .....	11,000	325,000	2,000	.....	.....	338,000
Aiken .....	1,637,505	41,500	40,000	500	.....	1,719,505
Allendale .....	1,096,500	61,000	.....	.....	.....	1,157,500
Anderson .....	.....	349,500	.....	.....	.....	349,500
Bamberg .....	147,600	3,000	.....	.....	.....	150,600
Barnwell .....	3,682,500	189,000	.....	.....	.....	3,871,500
Beaufort .....	233,500	1,500	.....	.....	.....	235,000
Berkeley .....	425,900	97,500	.....	2,000	.....	525,400
Calhoun .....	295,800	44,500	3,000	.....	.....	343,300
Charleston .....	128,250	10,000	750	1,750	.....	140,750
Cherokee .....	.....	296,000	.....	.....	.....	296,000
Chester .....	229,000	586,400	1,000	500	.....	816,900
Chesterfield .....	761,000	97,000	31,000	.....	.....	889,000
Clarendon .....	143,000	134,000	.....	.....	.....	277,000
Colleton .....	191,000	52,000	.....	.....	.....	243,000
Darlington .....	140,750	120,250	.....	.....	.....	261,000
Dillon .....	141,000	7,000	4,000	.....	.....	152,000
Dorchester .....	90,500	42,000	3,000	11,000	.....	146,500
Edgefield .....	60,500	859,500	.....	.....	.....	920,000
Fairfield .....	20,500	673,100	.....	.....	.....	693,600
Florence .....	170,500	44,500	1,000	.....	.....	216,000
Georgetown .....	895,500	.....	.....	.....	.....	895,500
Greenville .....	5,000	299,000	1,000	.....	.....	305,000
Greenwood .....	7,500	367,100	4,000	.....	.....	378,600
Hampton .....	652,000	10,000	.....	3,000	.....	665,000
Horry .....	133,000	203,000	.....	.....	.....	336,000
Jasper .....	589,000	53,000	.....	.....	.....	642,000
Kershaw .....	2,466,500	825,500	10,000	8,000	.....	3,310,000
Lancaster .....	33,000	561,000	.....	.....	.....	594,000
Laurens .....	7,000	603,000	.....	.....	.....	610,000
Lee .....	52,500	50,000	3,000	.....	.....	105,500
Lexington .....	476,300	109,000	26,200	1,000	.....	612,500
Marion .....	515,600	52,000	.....	.....	.....	567,600
Marlboro .....	169,000	40,000	.....	.....	.....	209,000
McCormick .....	4,500	353,500	.....	.....	.....	358,000
Newberry .....	15,000	720,500	500	.....	.....	736,000
Oconee .....	10,000	274,000	.....	.....	.....	284,000
Orangeburg .....	527,000	15,000	2,500	.....	.....	544,500
Pickens .....	2,500	197,100	.....	.....	.....	199,600
Richland .....	329,500	63,000	10,000	500	.....	403,000
Saluda .....	26,500	217,500	.....	.....	.....	244,000
Spartanburg .....	17,500	661,000	200	1,000	.....	679,700
Sumter .....	1,479,900	180,000	8,000	15,000	10,000	1,692,900
Union .....	100	950,900	2,000	3,500	.....	956,500
Williamsburg .....	88,000	23,000	.....	.....	.....	111,000
York .....	3,000	316,000	1,000	.....	.....	320,000
State Total .....	18,111,705	11,178,350	154,150	47,750	10,000	29,501,955
Out-of-State .....	50,000	4,866,000	.....	11,000	.....	4,927,000
GRAND TOTAL .....	18,161,705	16,044,350	154,150	58,750	10,000	34,428,955

TABLE 12—SEEDLING DISTRIBUTION—BY LAND CLASSIFICATION—1949-50

LAND OWNERSHIP	Slash	Loblolly	Longleaf	Spruce	Pine of India	Total
Farms .....	10,612,605	5,996,450	120,150	30,750	10,000	16,769,955
Other Individuals .....	19,000	15,000	.....	.....	.....	34,000
Associations and Clubs .....	147,000	3,000	.....	.....	.....	150,000
Schools .....	36,500	17,000	.....	.....	.....	53,500
State Forests .....	1,831,000	105,000	30,000	15,000	.....	1,981,000
Other State Lands .....	113,600	8,400	.....	.....	.....	122,000
Cities, Towns and Counties .....	15,000	30,500	.....	.....	.....	45,500
Forest Industries .....	4,849,000	2,957,000	.....	.....	.....	7,806,000
Other Industrials .....	488,000	946,000	.....	2,000	.....	1,436,000
Federal Lands .....	.....	1,100,000	4,000	.....	.....	1,104,000
State Totals .....	18,111,705	11,178,350	154,150	47,750	10,000	29,501,955
Out-of-State .....	50,000	4,866,000	.....	11,000	.....	4,927,000
GRAND TOTALS .....	18,161,705	16,044,350	154,150	58,750	10,000	34,428,955







Moonlight, palmettos and ocean at picturesque Hunting Island State Park.



STATE OF SOUTH CAROLINA

**REPORT**

OF THE

**STATE COMMISSION OF FORESTRY**

FOR THE YEAR

JULY 1, 1950 TO JUNE 30, 1951

CHARLES H. FLORY, State Forester



COLUMBIA, S. C.

Printed Under the Direction of the  
State Budget and Control Board

# TABLE OF CONTENTS

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	Page
LETTER OF TRANSMITTAL .....	5
PERSONNEL .....	7
SUMMARY .....	9
FOREST FIRE PROTECTION .....	17
Forest Area Protected .....	18
Forest Fire Protection Organization .....	19
Protection Personnel .....	21
Fire Protection Activities .....	21
Improvements, Maintenance and Equipment .....	26
Equipment .....	31
Forest Fire Summary .....	36
FOREST MANAGEMENT .....	39
Management Assistance .....	40
Reforestation .....	43
Cone Collection .....	44
Forest Survey .....	45
Farm Forestry .....	45
State Forests .....	46
Cassatt State Forest .....	47
Harbison State Forest .....	47
Manchester State Forest .....	47
Sand Hills State Forest .....	51
STATE PARKS .....	57
Vacation Accommodations .....	63
Other Facilities .....	64
Negro Areas .....	65
Accomplishments by Parks .....	67
Recommendations .....	68
Table of Facilities .....	71
PUBLIC RELATIONS .....	73
Cooperative Forest Fire Prevention Campaign .....	74
More Trees for South Carolina .....	76
Forestry Demonstrations .....	77
Conservation Week .....	77
Towersite Improvement Contest .....	79
Motion Pictures .....	80
Vocational Agriculture School Forests .....	80
Resource Use Education .....	82
Talks .....	82
Radio .....	83
Exhibits .....	85
Southern Information and Education Chiefs .....	88
Training .....	88
Publications and Posters .....	89
News Releases and Articles .....	91
Boys Forestry Camp .....	92
Sign and Woodworking Shop .....	92
South Carolina Tree Farms System .....	93
ADMINISTRATION .....	96
APPENDIX .....	97



## LETTER OF TRANSMITTAL

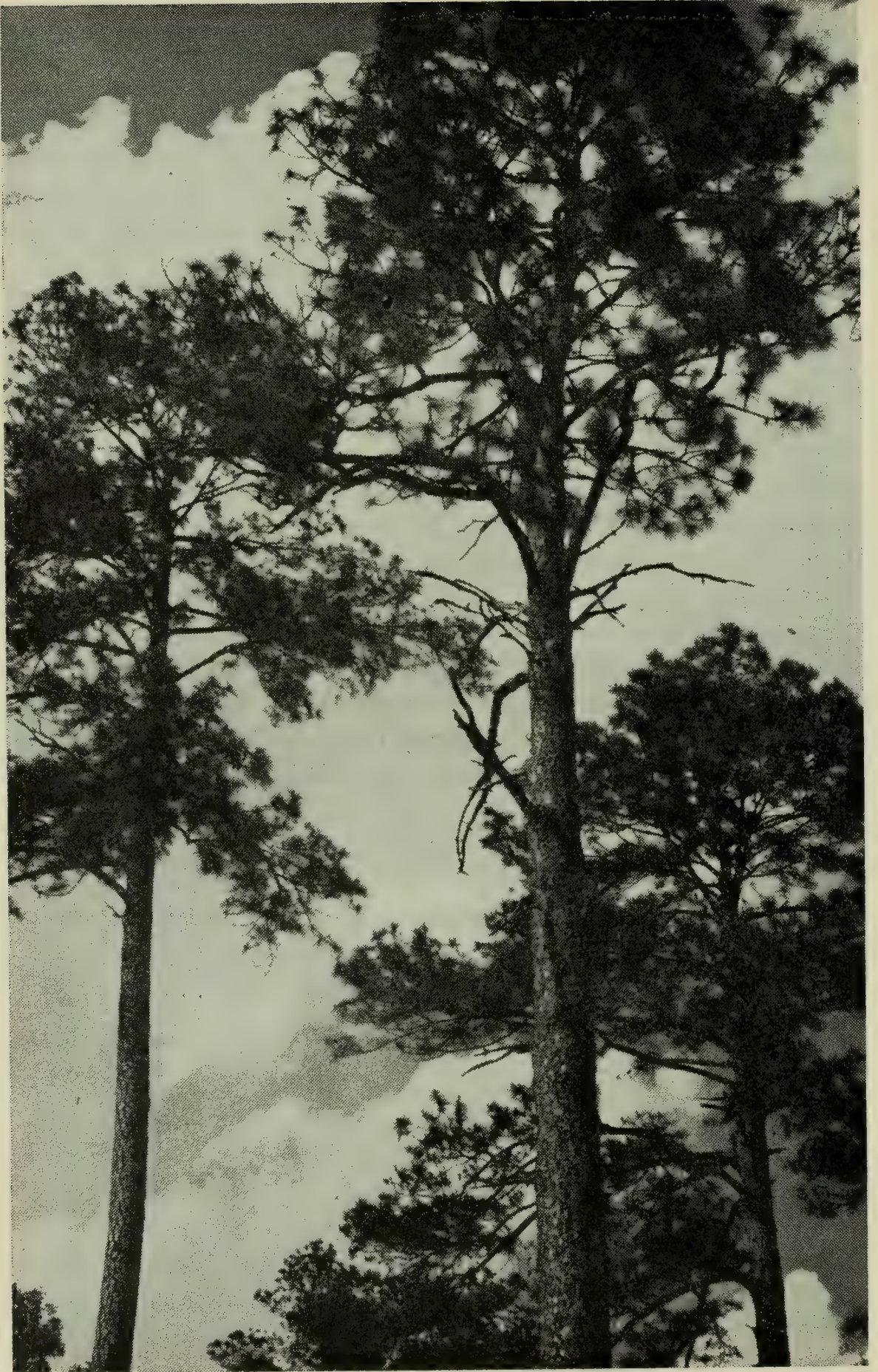
*To Honorable James F. Byrnes, Governor, and to the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1950 to June 30, 1951.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
A. Leland Slade, Jr., *Chairman*.





South Carolina's forests — the state's most valuable renewable natural resource.



## THE STATE COMMISSION OF FORESTRY

A. Leland Slade, Jr., Chairman, Aiken, S. C.  
 Dr. R. F. Poole, President, Clemson College, Clemson, S. C.  
 A. B. Taylor, Spartanburg, S. C.  
 Fulton B. Creech, Sumter, S. C.  
 \*Vendel M. Rogers, Mullins, S. C.  
 Chas. H. Flory, Secretary and State Forester

## DIVISION OF FORESTRY

E. C. Pickens (1), Assistant State Forester, Management, Columbia, S. C.  
 E. B. Price (2), Assistant State Forester, Administration, Columbia, S. C.  
 John R. Tiller, Assistant State Forester, Protection, Columbia, S. C.  
 John C. Witherspoon, Assistant State Forester, Public Relations, Columbia, S. C.  
 A. A. Lehocky, Management Assistant, Columbia, S. C.  
 Howard R. Scott (3), Management Assistant, Columbia, S. C.  
 John M. Shirer, Fire Control Assistant, Columbia, S. C.  
 W. J. Barton (4), Fire Control Assistant, Columbia, S. C.  
 John R. McLees, Fire Control Engineer, Columbia, S. C.  
 J. M. Geddings, Communications Engineer-Telephone, Columbia, S. C.  
 R. M. Littlejohn, Communications Engineer-Radio, Columbia, S. C.  
 Walter T. Ahearn, Public Relations Assistant, Columbia, S. C.  
 Nelson L. Peach (5), Public Relations Assistant, Columbia, S. C.  
 Virginia S. Holmes, Head, Personnel & Office Services, Columbia, S. C.  
 C. H. Nelson, Head, Fiscal & Accounting, Columbia, S. C.  
 Hugh White, Head, Property & Supply, Columbia, S. C.  
 Cole L. Page, District Forester, Aiken, S. C.  
 Vern H. Cutler (6), District Forester, Camden, S. C.  
 A. E. Kunz, Acting District Forester, Florence, S. C.  
 Victor T. Chastain (7), Acting District Forester, Kingstree, S. C.  
 E. L. Middleswart, District Forester, Newberry, S. C.  
 Fred N. Mack, District Forester, Spartanburg, S. C.

---

\* Replaced Guy V. Whitener, whose term expired May 1951.

W. L. Hardin, District Forester, Walterboro, S. C.

Randolph B. Lee, Director, Sandhills State Forest, Patrick, S. C.

C. W. Nuite, Director, Manchester State Forest, Wedgefield, S. C.

L. M. Staley, Nurseryman, Wedgefield, S. C.

### DIVISION OF STATE PARKS

C. West Jacocks, State Park Director, Columbia, S. C.

T. D. Ravenel, Assistant State Park Director—Operations, Columbia, S. C.

E. R. Vreeland, Assistant State Park Director—Operations, Columbia, S. C.

Albert Schellenberg, Assistant State Park Director—Plans, Columbia, S. C.

- 
- (1) Promoted from Management Assistant to Asst. State Forester, Management, on June 16, 1951.
  - (2) Transferred from Asst. State Forester, Management, to Asst. State Forester, Administration, replacing D. G. Duncan, Administrative Assistant, who resigned June 5, 1951.
  - (3) Promoted from District Forester, Kingstree District, to Management Assistant, Columbia Office, June 16, 1951.
  - (4) Transferred from Public Relations Asst. to Fire Control Asst., on July 16, 1950.
  - (5) Promoted from District Forester, Camden District, to Public Relations Asst., on July 16, 1950.
  - (6) Promoted from Asst. Forester, Camden District, to District Forester, Camden District, July 16, 1950.
  - (7) Promoted from Asst. Forester, Walterboro District, to Acting District Forester, Kingstree District, on June 16, 1951.



## SUMMARY

Last year's records of service to the people of the state were broken by the South Carolina State Commission of Forestry again this year.

A record state park system attendance of 2 million visitors last year was broken with a count 2½ million in 1950-51.

An all-time high of nearly 1,000 private landowners were given assistance with their woodland problems.

Orders for forest tree seedlings again exceeded the supply.

Fires in South Carolina's woodlands were confined to an average of 22.3 acres per fire by county fire fighting forces. This is contrasted with 28.5 acres per fire last year.

Educational activities of the Commission were increased to partly meet the demand for these services. Significant advances were made in the field of forest fire prevention and with the State Parks "School of the Air" program.

There were 147 resignations of technical and other personnel during the year. Twenty-three per cent (23%) of this total were County Unit personnel.

### Forest Fire Protection:

It is now the belief of the Commission that the fundamental reason why woods fires occur in South Carolina is simply that most people do not fully realize the damage caused by the average type of fire. Most of these fires are not the western type that roar through the tops of trees. They usually burn fairly close to the ground here in South Carolina, and after the grass turns green in the spring, the damage is usually hidden.

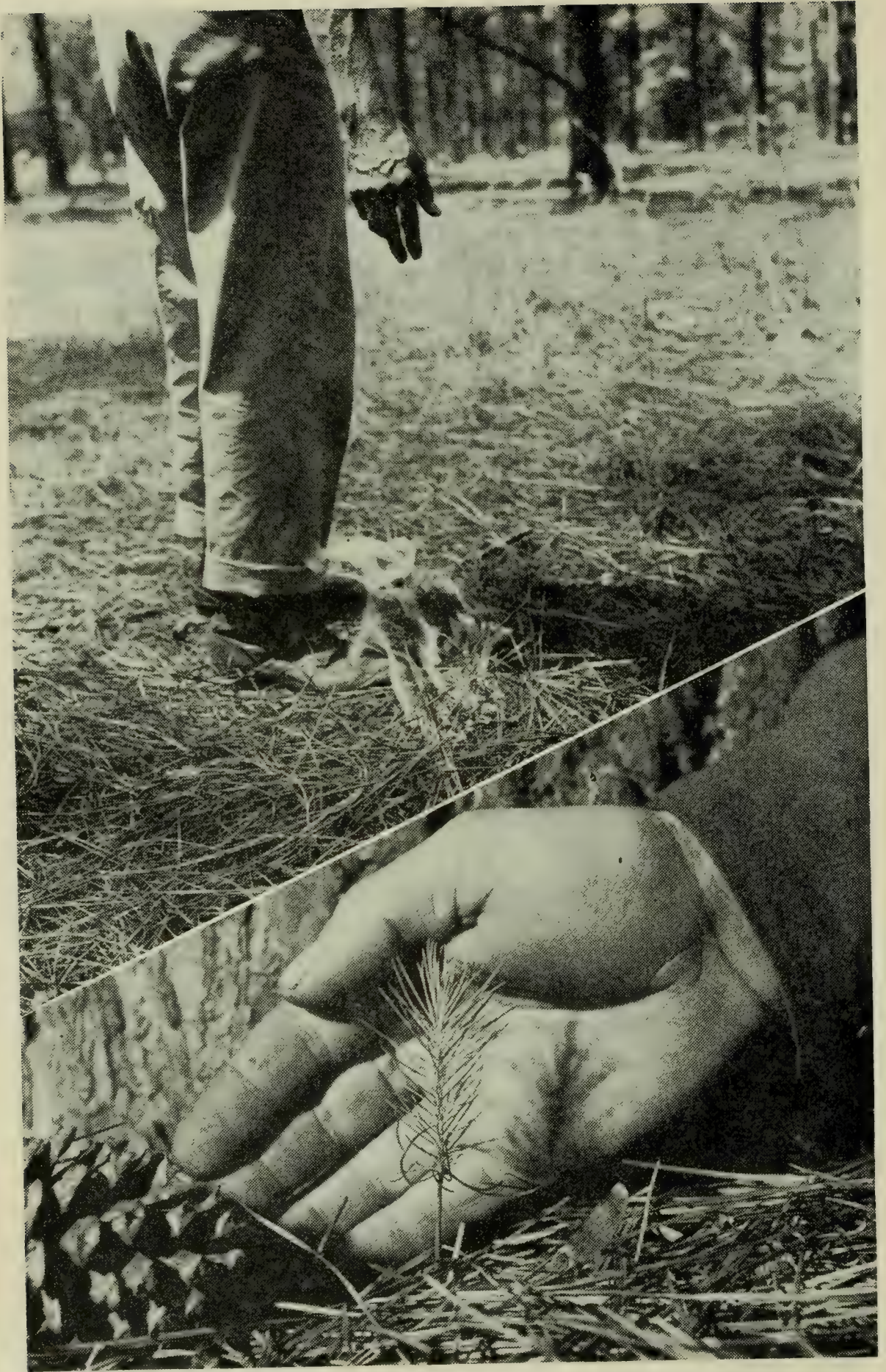
For this reason many fires are started because of the philosophy that "they can't hurt anything and they might do some good". Some think woods fires kill boll weevils, ticks, screw worms, and other pests.

Some burn to keep the woods open for better shooting. Some burn to make unimproved woodland pastures "green up" quicker. And there are other reasons for intentional burning.

Many fires are caused by carelessness. The fact that the damage is hidden by green grass in the spring breeds carelessness.

Whatever the reason, the facts do not support the logic behind annual woods burning. Careful weighing of all values





By our own hand we destroy or protect . . . the choice is ours.



concerned shows that "it doesn't pay". The economy of the state is suffering now because of wildfire. But the greatest blow from this year's 6,643 fires falls on our children's future.

Even quietly burning, "harmless" woods fires kill little trees Nature so bountifully but futilely plants in the grass each year.

It often only takes 12 years from seed to salable products—thus influencing a first grade child's future by the time of high school graduation. Adequate protection from forest fires in South Carolina will not become a reality until this is generally understood.

Progress in forest protection in some respects has been outstanding in South Carolina during the last five years. The State Commission of Forestry has developed tools and techniques that have been adopted by every state in the South. Before any organized protection force was in operation, some county estimates of woodland area burned annually used to run as high as 85% less than 10 years ago. This year the same counties show burned areas that measure less than 2%.

### **Forest Management:**

At present the woodlands of the state are producing only  $\frac{1}{3}$  to  $\frac{1}{2}$  of what they are capable of producing, because of inade-



More and more landowners are recognizing that timber is a crop, and that repeated crops of timber can be grown and harvested.

quate fire protection, poor cutting practices and a large acreage of idle land in need of planting.

Much progress was made during the year in applying forest management to the woodlands of the state.

An all-time high of nearly 1,000 private landowners were assisted by Commission foresters in managing their woodlands. Commission foresters selectively marked timber for harvesting for 339 woodland owners.

Although more than 20 million forest tree seedlings were grown and distributed for planting in South Carolina, the demand for seedlings again exceeded the supply.

Much work was accomplished on the 4 State Forests, including tree planting, firebreak plowing, sale of forest products, prescribed burning, improvement cuttings, control of undesirable hardwoods, and activities such as maintenance of telephone lines, roads, truck trails and existing structures.

### **State Parks:**

During the year a new record for attendance was set when more than 21½ million visitors enjoyed the State Parks.

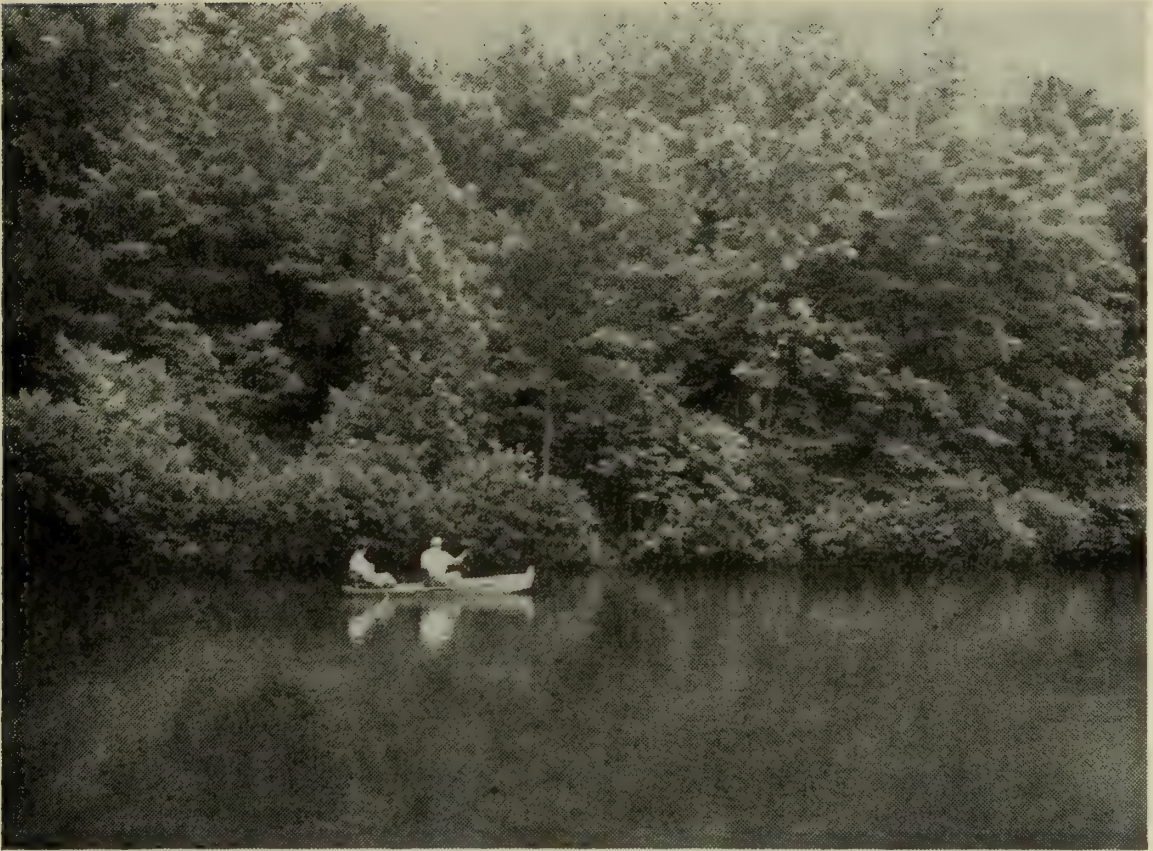
More and more people each year are using State Park facilities for picnicking, swimming, boating, family vacations, and as out-of-door classrooms for teaching conservation, geology nature study and history.

During the year much planning and preliminary work was done for two new State Parks which were acquired late in the year—Little Pee Dee State Park (for white) near the Dillon-Marion County line, and Pleasant Ridge State Park (for Negroes) in the mountains of Greenville County. Additional areas should be developed to meet the needs of our colored population, and facilities in existing white and Negro State Parks should be expanded and maintained to provide for the increasing use being made of them.

Training of park personnel was emphasized during the year, resulting in a more efficient operation and maintenance program in the parks.

A "school-of-the-air" series of radio programs was launched during the year to help carry out one of the functions of State Parks—to encourage an understanding and appreciation of the things of nature.





Fishing is a popular activity at South Carolina's State Parks.

The new 640-foot fishing pier at Myrtle Beach State Park had a highly successful year of operation. Some twenty thousand fishermen and many thousands of other visitors visited and used this new facility.

The family vacation cabins at 7 of the State Parks were reserved for the entire summer season, and the off-season use of these facilities is steadily increasing. The seven group camps are being used by Boy Scouts, Girl Scouts, YWCA, YMCA, church groups, school groups and others.

#### **Public Relations:**

Significant plans and new programs marked a real increase in the role of education in the Commission's work of stressing the need for wiser use of our forest and recreational resources.

Acknowledging the need for a more intensified fire prevention program, the Commission laid the ground-work for a state Fire Prevention Plan which would affect the educational and informational program in every county in the state.

It is felt that the plan, along with the basic concept that just a little fire kills little trees, will have a marked effect on the



continued reduction of destructive fires in South Carolina. Plans were also made to provide each county ranger with a new prevention tool; namely, a slide projector with a set of colored slides. This single prevention tool will increase greatly the effectiveness of programs held at landowner meetings and community meetings. It will also make it possible to re-initiate an intensive school program whereby county personnel can make an interesting illustrated talk in every school in the state.



Exhibits help to carry a forestry message to hundreds of thousands of people each year.

The radio work of the Commission was greatly increased by the initiation of a new 15-minute radio program sponsored by the Division of State Parks. Twelve such programs entitled "The World Is So Full Of A Number Of Things" were well received. It is expected that this particular series which covered the historical and natural features of our State Parks will be continued next year.

The number of exhibits and displays placed by the Commission during the past year increased to 61. These were displayed in county fairs, state fairs and other special expositions. This constitutes an increase of approximately 16 exhibits and displays over the number that were shown the previous year.

During the calendar year of 1950 South Carolina achieved national recognition by adding more tree farm acreage to the Tree Farm system than any other state in the nation. This



program, along with the "More Trees for South Carolina" program, sponsored by the American Legion, industrial groups and public agencies, has greatly improved the number of acres in South Carolina that are producing a maximum amount of forest products.

### **Recommendations:**

The major functions of the Commission of Forestry, as charged by statute, are: protection of the private forest lands of the state from fire; assistance to private woodland owners in the development and management of their woodlands, and in the harvesting and marketing of their forest products; the establishment, development and operation of a system of State Parks. To enable the Commission of Forestry to more effectively carry out its responsibilities so that the forests of the state produce the maximum production of forest products and other benefits to the people of the state, the following recommendations are made:

(1) Intensify the education program to reduce the number of fires which still occur each year.

(2) Strengthen fire laws to discourage indiscriminate setting of fire, especially during critical periods, and to provide more severe penalties for setting fire to lands of others.

(3) Provide for some additional county fire control personnel and additional mechanized equipment and hand tools; complete the badly needed two-way radio system. Funds should also be provided to adequately maintain equipment and permanent improvements.

(4) Provide for an increase in the production of forest tree seedlings needed to plant the one and a half million acres of idle land in the state.

(5) Provide adequate funds to operate the twenty-one state parks and to adequately maintain the buildings, installations and equipment.

(6) Provide for groins to control beach erosion at Hunting Island Negro area, additional facilities at all existing Negro areas, and the acquisition of a Negro park to serve metropolitan Columbia and central South Carolina.

(7) Salaries should be increased where they are out of line with the training and responsibilities of the individual.



The basic reason for fire protection in South Carolina needs to be brought forcefully to the attention of every man, woman and child in the state. Recognizing this great need, the Commission is placing added emphasis on the educational phases of forest fire protection work. The poster above is one of several which will be displayed in schools, stores, community halls and public buildings in every county in the state.



## FOREST FIRE PROTECTION

South Carolina has made good progress concerning fire protection since the overall forestry plan was conceived in 1928 by the Forestry Commission.

During the early days, before there was any organized protection, woods fires burned until it rained or until they burned out. There was no organized attempt to control these fires. Later in the middle 1930's and the early 1940's, it was a common occurrence for fires to burn for three or four days until they were brought under control by state and county fire fighters. This was before any mechanized equipment was available, and before the fire control organization was sufficiently experienced. Now, most fires can be handled in a matter of hours. Some mechanized equipment has been developed and acquired to combat woods fires, and fire fighters have gained valuable experience.

*However, with all of this progress, it is evident that South Carolina does not yet have adequate forest fire protection. Too many fires still burn too many acres of woodland. During the fiscal year 1950-51, 6,643 fires burned 147,840.3 acres of forest land, or 1.31% of all woodland area in the state. This is much too high. Woodland owners and forest industries cannot afford such a loss. The per cent of area burned annually must be held to one-half of one per cent if woodland owners are to economically and safely grow timber. The woodland areas of the state are producing only one-third the amount of wood that they are capable of producing. Destructive fire has been one of the main factors responsible for this understocked condition of the woodlands of South Carolina. With adequate fire protection and other improved forestry practices, the wood production in the state could easily be doubled.*

With experienced men and good equipment, the fire protection organization was able to hold the average acreage burned per fire to 22.3 acres, an excellent job, considering the large number of fires occurring. It is reasonable to believe that this average acreage per fire and the total acreage burned could be considerably reduced if more fires were prevented from starting. *The goal of adequate protection is no more than 2,500 fires annually, burning not more than one-half of one per cent of the woodland in the state.*

Several improvements must be made before South Carolina will have adequate protection. They are as follows:

1. Fire occurrence must be reduced through an *intensive educational program*. When we have fewer fires, we will have fewer acres burned. The major duty of the Forestry Commission at present is to reduce the number of man caused fires occurring annually in the state.
2. Communications must be improved. *Complete two-way radio is desperately needed*.
3. *Some additional mechanized equipment and hand tools are badly needed*.
4. Some additional county unit personnel are needed.
5. *Fire laws must be strengthened to discourage indiscriminate setting of fire*, especially during critical periods, and to provide more severe penalties for setting fire to lands of another.
6. *Provisions must be made to adequately maintain equipment and permanent improvements*.

Despite the several needs which must be provided to give South Carolina adequate fire protection, the forest fire control organization continued to direct its activities toward the exclusion of destructive wild fires from all woodlands in South Carolina. The following pages describe in some detail the Commission's fire protection organization, its activities and its accomplishments during the fiscal year 1950-51.

### FOREST AREA PROTECTED

The total area of state and private forest land on which the Commission of Forestry cooperates in furnishing fire protection amounts to 11,300,008 acres. A total of 168,417 acres of forest land in State Parks and State Forests are included in this figure, the remaining area of woodland being entirely privately owned.

The area of forest land under statewide fire protection does not include 584,492 acres within the National Forest boundaries and protected by the U. S. Forest Service, nor does it include 58,100 acres of woodland under the jurisdiction of and protected by other federal agencies.





The thousands of "quiet" fires that occur each year in South Carolina are killing millions of little trees planted by nature at no cost to the landowners.

### FOREST FIRE PROTECTION ORGANIZATION

All forest fire protection work is conducted on a cooperative basis with the landowner. Even though the Commission renders protection assistance whenever and wherever possible, the landowner is not relieved of the responsibility for fires on his property.

The state is divided into seven (7) forest districts. The administration of all forestry activities, including fire protection, is under the direct supervision of the District Forester.

#### County Units:

Each of the seven (7) forest districts is further broken down into individual county units which are supervised by the unit rangers, under the direction of the District Forester. All fire protection activities within each unit are carried out by the organization personnel which consists of a ranger, wardens, towermen, tractor operators, warden and tractor flexible crews, and volunteer crews.

The wardens who are assigned to districts within the county are responsible to the unit ranger for all fire protection activities within their respective districts. The duties of the towermen are



primarily to detect, locate, and report all forest fires within their visual range. During periods of low fire hazard, the towermen also conduct maintenance work at their towersite and assist other members of the organization in fire prevention activities. The tractor operators operate the mechanized equipment which is used on those fires which cannot be handled adequately by other members of the organization with hand tools. During periods of high fire occurrence, warden and tractor flexible crews are employed to assist the organization. The ranger and wardens also organize a number of volunteer fire crews in each community of the county. The men who comprise these crews assist in the prevention and suppression of fires primarily in their locality.

### **State Forests and Parks:**

The combined forest acreage of all State Forests and Parks is 168,417 acres. These State Forests and Parks receive cooperative forest fire protection assistance from the local county unit organization, the district offices, and the central Fire Control office. The forces maintained on the Forests and Parks areas, however, are primarily responsible for protecting the area under their jurisdiction.

### **National Forest Protection:**

The U. S. Forest Service provides and supervises fire protection on the 584,492 acres of National Forest land in South Carolina. The two National Forests in South Carolina are the Francis Marion National Forest, located in the lower coastal plains, and the Sumter National Forest, located in the Piedmont.

### **Cooperative Agreements:**

In order that fire protection work may be coordinated on the National Forests and private forest land, cooperative agreements have been drawn up and put into effect by the U. S. Forest Service and the State Commission of Forestry. Definite protection boundaries have been established whereby each agency is responsible for protection of the forest lands which comprise the greater area in the immediate vicinity of the property in question.



## PROTECTION PERSONNEL

No material change over that of the previous year was made in the number of persons employed in connection with forest fire prevention work. Numerous changes and turnovers were experienced, however, in the various positions below the ranger level. All county units, however, were kept completely organized throughout the year, replacements being made shortly after vacancies occurred. A total of 576 persons were employed in fire protection and suppression work either part or full time. This number included 46 rangers, 132 wardens, 136 towermen, 37 tractor operators, and 224 individuals employed in retainer and flexible crews. In addition, 2,328 persons were organized in volunteer fire crews. A total of 22,816 other individuals voluntarily assisted the regular unit organization in fire suppression in their respective communities. A grand total of 25,720 persons were engaged in one way or another with fire protection work with the Commission of Forestry during the year.



Periodic training has made possible continued high performance of Commission personnel in carrying out the varied phases of fire protection work.

## FIRE PROTECTION ACTIVITIES

### Training:

Training for regular protection personnel, as well as organized volunteers and other persons, was carried out during the



year with good results. In addition to the regular scheduled training meetings, in-service training was given to members of the various organizations in each county.

In the late fall of 1950, a two-day training session was conducted for each of the district organizations comprising technical personnel, unit rangers, wardens, tractor operators, and tower-men.

A one-day tractor training school was held in each of the districts operating mechanized fire suppression equipment.

In January, 1951, all technical personnel attended a one-day training session at Columbia.

The recently organized Fire Control Coordinating Committee held its first meeting at Myrtle Beach on June 21 and 22. This Committee is composed of a unit ranger representative from each district, all District Rangers and District Foresters, and also the Fire Protection personnel of the central office. The purpose of this Committee is to meet periodically, discuss fire protection matters and formulate ideas and means for improving the overall efficiency of fire control work.

Numerous small group community meetings were conducted in each county of the state. This type meeting gives the organization a better opportunity to work directly with the landowners on their specific protection problems.

### **Inspection:**

Each District Office conducted detailed inspections of county unit organizations and operations. In addition to the regular organization inspections, three Traveling Mechanics made periodic inspections of all motorized equipment located in each of the counties to insure that its equipment is kept in good operating condition and ready for immediate use at all times. A detailed report of each inspection is prepared with recommendations and is transmitted to the field personnel for their guidance in correcting deficiencies noted.

The various inspections conducted each year have accomplished much in bringing the organizations up to prescribed standards and greatly increasing the efficiency of the various activities.

### **Fire Plans:**

During the latter part of the fiscal year all unit fire plans which had been in effect for the past four (4) years were revised and brought up to date to conform with new developments, poli-



cies, and procedures. These plans are used by all fire control personnel as a ready reference in carrying out any phase of the fire protection program.

#### **Law Enforcement:**

All illegal fires were carefully investigated by county units and district personnel in an effort to determine the responsibility for the fire. Where sufficient evidence is secured, enforcement of the State Fire Laws is carried out. A total of 398 persons were prosecuted for setting illegal fires. Of this total, 385 persons were convicted. Florence County led the state with 35 prosecutions and 33 convictions. Based on the number of fires occurring, however, Lee County led with one prosecution for each 3.8 fires. Other county units maintaining high averages were Newberry, Horry, Chester and Kershaw.

#### **Burning Permit Law:**

During the 1951 session of the Legislature the Marlboro and Charleston County Delegations passed a Burning Permit Law for their counties. Inasmuch as Georgetown and Horry Counties passed Burning Permit Bills the previous year and Aiken, Greenville, and Orangeburg Counties already had in effect laws which date back a number of years, there are now a total of seven (7) counties in the state which have County Burning Permit Laws which require that permits be secured by persons who plan to burn brush, fields, and ditchbanks adjacent to woodland areas between the dates of October 15 and May 15 of each year.

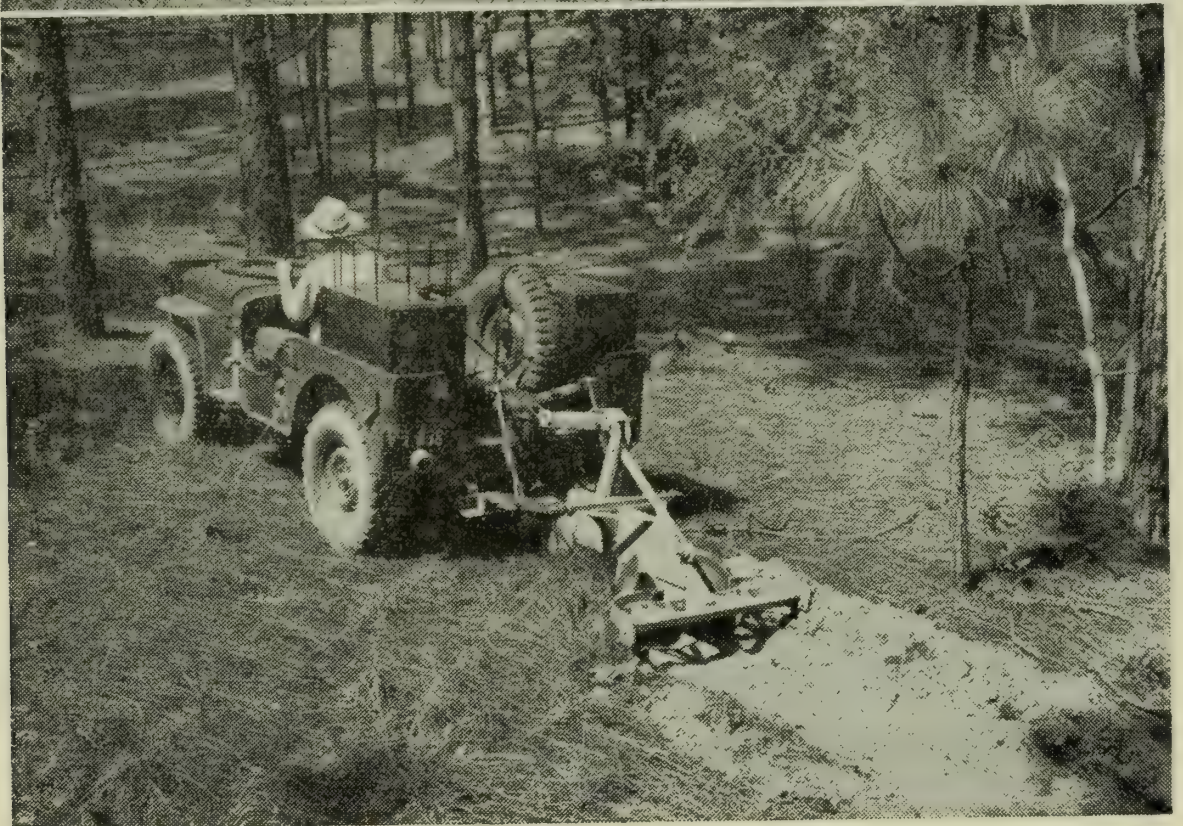
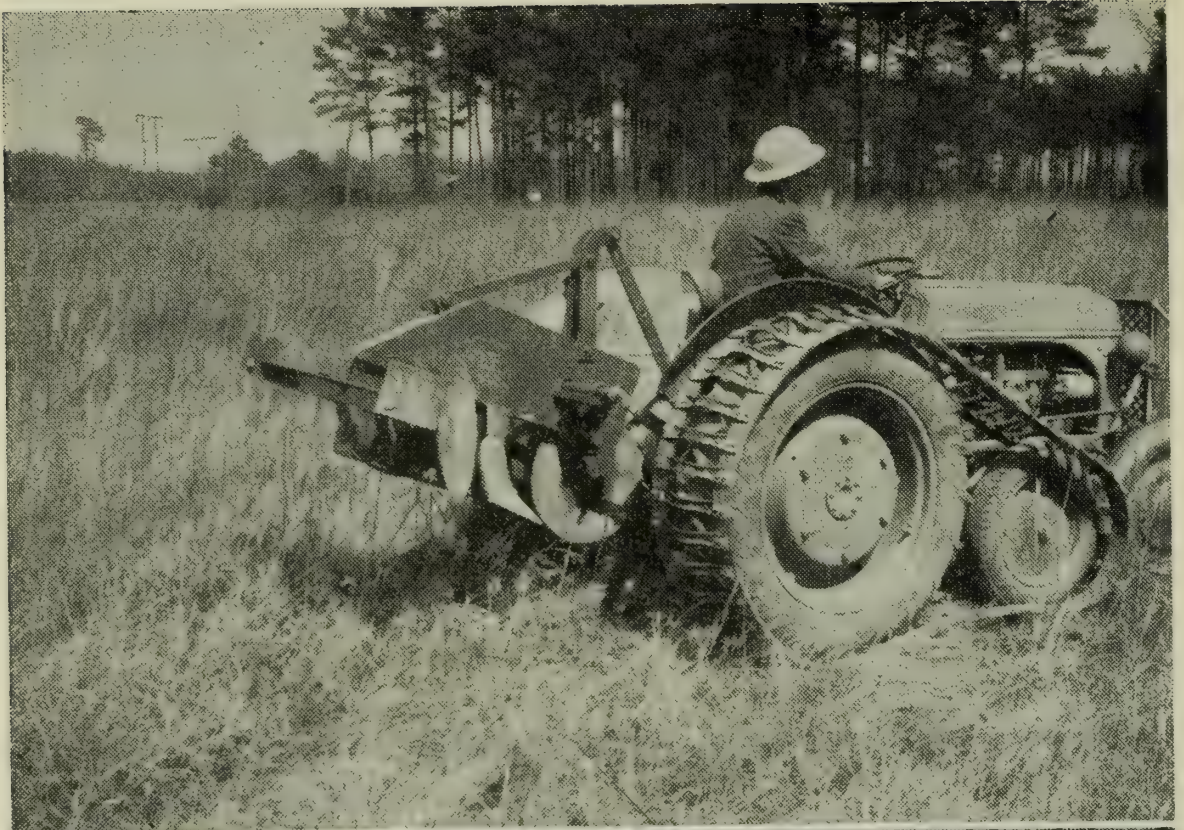
A total of 9,613 permits were issued in these seven counties during the year. Of this total, only 11 of the fires were allowed to burn areas not intended to be burned by the landowner. Twenty-seven (27) persons were prosecuted for violation of the Burning Permit Law.

During the 1951 session of the General Assembly, a state-wide Burning Permit Bill was introduced, but was not enacted.

#### **Southern States Fire Control Conference:**

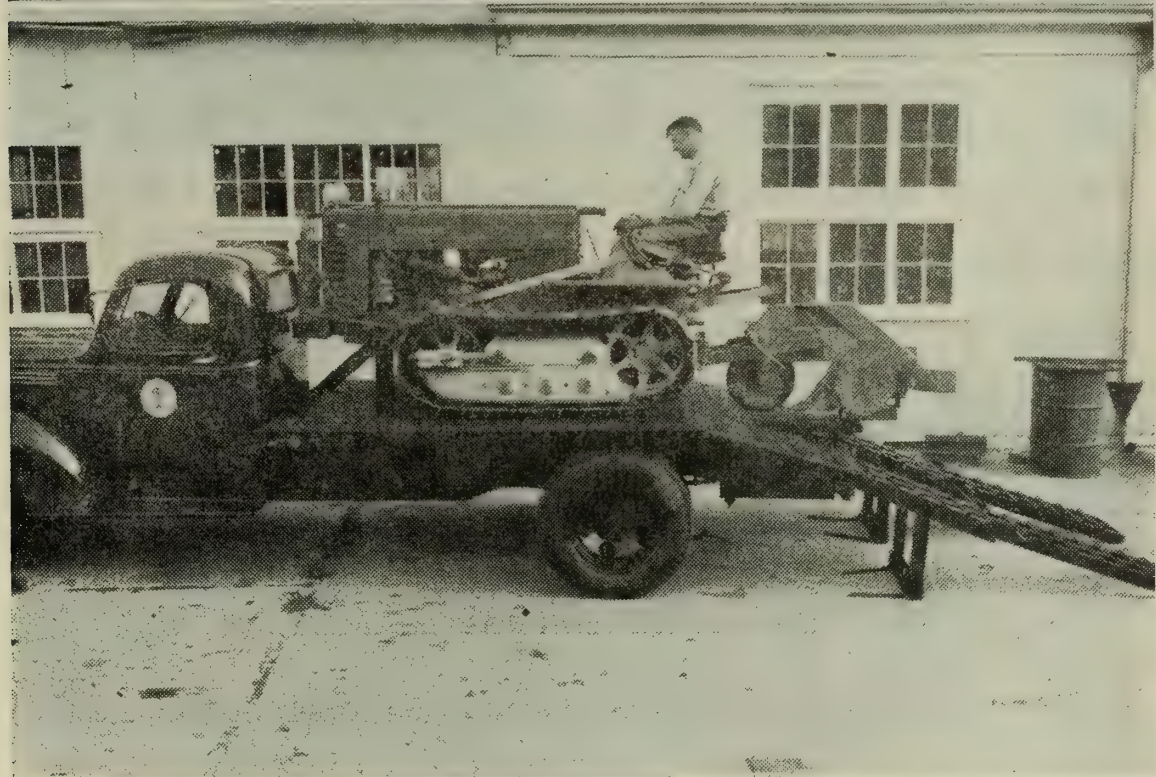
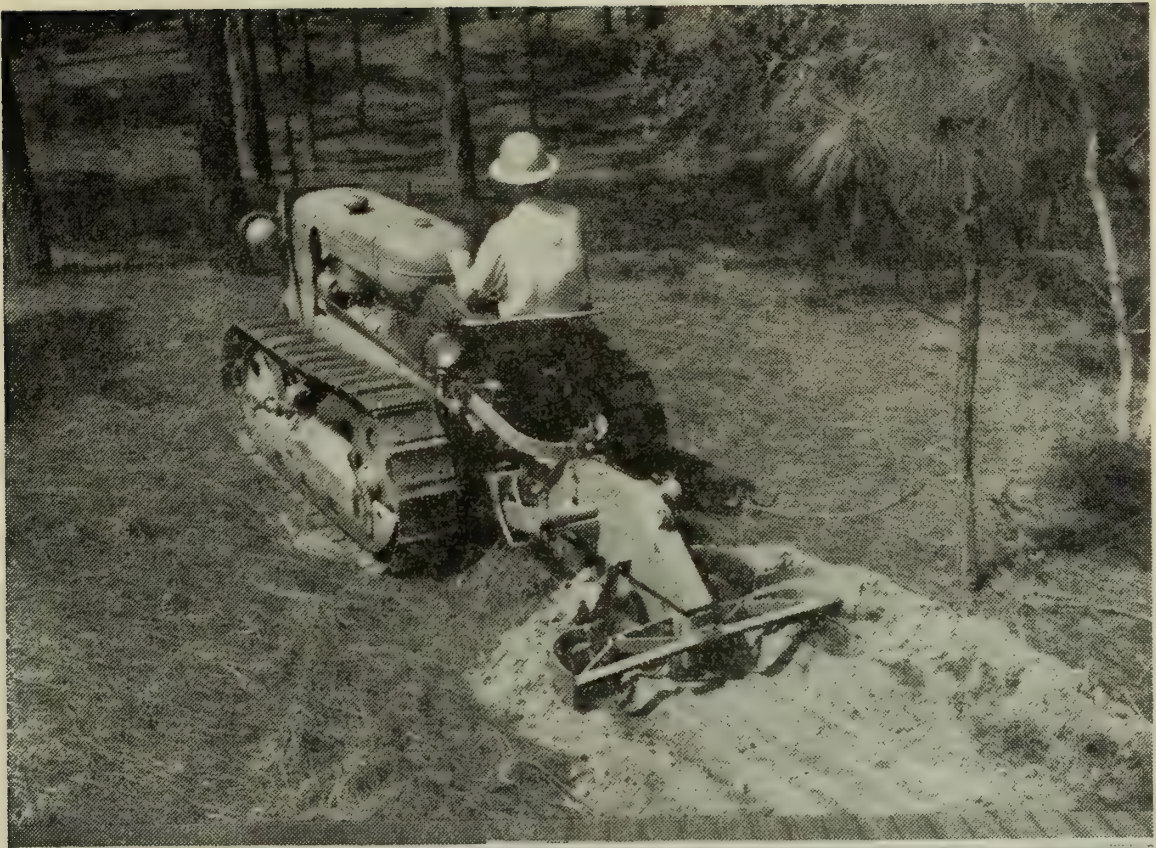
All of the Southern States Fire Control Chiefs met jointly with the Information and Education Chiefs and State Foresters at Ocala, Florida immediately after the close of the spring fire season. All discussions and efforts were directed to the coordination of activities and improving the overall fire protection program. Much emphasis was placed upon fire prevention and plans were made to intensify activities in that particular field.





All light suppression units in the state have been equipped with C-150 type fire-break plows, developed by Forestry Commission personnel.





In addition to the plow, Commission personnel have developed a new transport body that makes loading and unloading of equipment much easier.



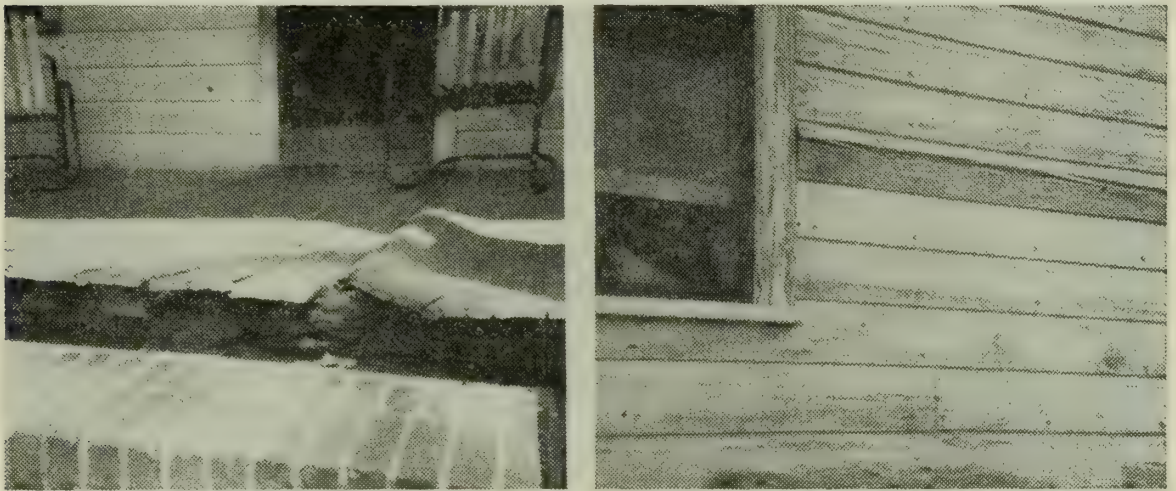
## IMPROVEMENTS, MAINTENANCE AND EQUIPMENT

### Lookout Towers:

There are 157 lookout towers in South Carolina, of which 133 are owned by the Commission.

It was necessary to replace one old wooden tower in Lexington County with a steel structure which was obtained from war surplus. This work was accomplished by regular employed personnel.

There are twelve remaining wooden structures, some of which are more than 15 years old, which will have to be replaced in the near future.



Fire protection improvements require continual work and expenditure to maintain.

### Tower Unit Buildings:

A standardized tower unit consists of a lookout tower, dwelling, water well and barn. There are 23 sites that are not yet provided with dwellings and wells, and 39 are not provided with barns and other out buildings.

Maintenance of the tower units has come to a standstill. Only \$1,000.00 was provided for the maintenance during the last 12 months' period. This was used almost exclusively for maintaining water wells.

Field inspection and estimates submitted during June, 1951, indicate that a minimum of \$42,000 would be required to bring these units up to an acceptable maintenance standard.

### Telephone Lines:

The Commission continued to make improvements to the telephone communications system during the year. Inasmuch as



the basic telephone communications system was completed several years ago, only a very few miles of new construction was needed. All maintenance and repair work was carried out by members of the various unit organizations under the supervision of the District Rangers and the Telephone Communications Engineer. Through conscientious efforts of unit personnel, very few handicaps were experienced in maintaining complete communications with all fire towers, personnel and other stations during the entire fire season.

For a number of years, the Commission has recognized the desirability and increased efficiency of replacing telephone communications with two-way radio and has directed efforts along that line. Several years ago, the General Assembly authorized the Commission to sell telephone lines to private companies and other interested parties with receipts from these sales to be used for purchasing and installing radio units. During the fiscal year, approximately 201 miles of telephone lines were sold and radio units installed in all of the stations and vehicles affected by the sales.

It is hoped that eventually all of the remaining 2,224 miles of telephone lines in the state can be sold in order that all fire control activities may be greatly facilitated with this more efficient type of communication.

#### **Radio:**

The radio communications program received somewhat of a boost during the fiscal year 1950-51 because of funds received from the sale of some telephone lines. Following is a summary by counties of installations made from receipts of telephone line sales or from other funds where indicated:

Lancaster	—Complete county-wide installation.
Chester	—1 160 Mc. base station 4 160 Mc. mobile units 3 160 Mc. paging receivers
Fairfield	—1 160 Mc. base station 1 160 Mc. mobile unit 1 160 Mc. paging receiver
Berkeley	—2 160 Mc. base stations 1 160 Mc. mobile unit

Dillon	—2 160 Mc. base stations 3 160 Mc. mobile units (The funds for this equipment were furnished by Dillon County.)
Georgetown	—2 160 Mc. base stations 2 160 Mc. mobile units 2 160 Mc. paging receivers
Beaufort	—Complete county-wide installation. (The funds for part of this equipment were furnished by Beaufort County).

In addition to the above, four District Offices—Camden, Aiken, Walterboro, and Kingstree, were equipped with 30 Mc. 50-watt units. These units, plus one for Florence, were purchased during 1949-50 fiscal year. On May 28th, a bid was awarded for 30 Mc. 50-watt units for Newberry and Spartanburg District Offices.

Two second hand mobile units were purchased and installed in cars owned by the Assistant State Forester-Protection, and the Fire Control Engineer for better coordination of administrative and field activities.

The Branch of Forest Management purchased two 30 Mc. mobile units for Sand Hills State Forest and one 30 Mc. mobile unit for Manchester State Forest to aid in the fire detection and suppression program of these areas.

When all equipment now on hand is installed, the Commission will have a total of 51 base stations and 56 mobile units in operation.

Cooperating companies installed 13 additional units during the fiscal year, thus increasing the mobile units now operated by private industry to a total of 33. One cooperator purchased 3 Handi-Talkie units.

In November, 1950, a Radio Technician was employed to assist in installation and maintenance of radio equipment. However, the equipment has since increased to a point where additional technical help is badly needed.

A fire at Meade Tower in Horry County destroyed the radio equipment there, and a replacement unit was ordered for this tower.

The use of the Handi-Talkie radio in an aircraft for spotting and reporting fires was continued with great success during





The use of aircraft, equipped with 2-way radio, in detecting and reporting fires helped considerably, especially on days when visibility from towers was poor. Great need exists for expansion of radio facilities and use of aircraft to supplement present detection facilities.

the last fire season. Several additional planes used for spotting fires were not equipped with radio communication, and were greatly handicapped in reporting these fires.

In April, the Columbia Office antenna and transmitter were moved from a leased area to a point adjacent to State Park Tower, and on property of the Commission. This gave a considerable increase in antenna height, thereby affording greater range in communications from Columbia. All other activities in radio during the fiscal year were limited to maintenance of existing equipment.

#### **Firebreaks:**

Due to limited funds, no firebreaks were constructed with state-owned equipment during the year. Horry County continued to

construct and maintain firebreaks with county-owned equipment. This unit constructed a total of 557 miles of pre-suppression breaks for landowners and was also used for fire suppression plowing throughout the county. A considerable number of landowners throughout the low country purchased their own tractor and plowing equipment during the year for construction and maintenance of fire lines on their private holdings. It is anticipated that more and more landowners will buy their own equipment in future years. One commercial operator, using a heavy crawler type plowing unit, also rendered fire line service to numerous landowners.

### **Aircraft in Fire Protection:**

Aircraft definitely has its place in forest fire protection. Planes can be used not only to supplement tower detection but also to help fire crews get to fires and fight fires.

During the blow-up situation last April in the Sand Hills, fires were so numerous that it was nearly impossible for towers to function properly. A light plane equipped with radio was an invaluable aid in picking up fires and also in directing crews to the fires and the best place to start fighting them. Undoubtedly aircraft saved much valuable timberland from burning during this period. In the future it is hoped that the use of aircraft in fire protection can be expanded.

The South Carolina Wing of the Civil Air Patrol also cooperated with the Commission during several periods of extremely bad fire weather.

### **Fire Danger Measurement Stations:**

All fire protection activities within each county unit are governed primarily by the class fire day information taken from the local fire danger measurement stations. These readings, which are taken four times daily from each of these weather stations, have greatly increased the operational efficiency of the various unit organizations in fire protection activities. Average records for the state indicate the following number of class fire days for each of the five major ratings: 102 Class No. 1 days; 124 Class No. 2 days; 113 Class No. 3 days; 25 Class No. 4 days; and 1 Class No. 5 day.



## ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

Items	Value
133 Lookout Tower Units .....	\$ 1,411,730.00
1,177 Miles Truck Trails .....	2,942,503.00
2,224 Miles Telephone Lines .....	667,200.00
43 Fire Danger Measurement Stations .....	3,000.00
Radio: 55 Tower Units, 38 Mobile Units, 14 Paging Receivers, 1 Handi-Talkie .....	77,035.00
<b>TOTAL</b> .....	<b>\$ 5,101,468.00</b>

## EQUIPMENT

It was possible to purchase 10 new trucks, one medium crawler tractor, and one light wheel type tractor with track system during the fiscal year.

The Branch of Forest Fire Control operates a fleet of 131 tractors and trucks and the 10 new trucks and 2 tractors represented a very low percentage of the equipment that should have been replaced. The conditions under which our Fire Control equipment operates are very severe and can only be compared to the conditions encountered by logging equipment, which are considered the worst.

From the standpoint of economy in operation and obsolescence, the equipment should be replaced at a more rapid rate. A large percentage of the equipment now in operation has been in use since 1946.

**INVENTORY FIRE TOOLS & EQUIPMENT AND ESTIMATED  
REPLACEMENT VALUE**

June 30, 1951

Items	Value
3,107 Back Pack Pumps -----	\$ 42,472.69
6,867 Fire Rakes -----	15,794.10
3,237 Fire Swatters -----	8,825.00
5 Heavy Crawler Tractors -----	31,000.00
1 Medium Crawler Tractor -----	2,400.00
5 Light Crawler Tractors -----	10,500.00
10 Heavy Duty Fire Plows -----	9,650.00
17 Light Semi-Crawler Tractors -----	29,750.00
23 Light Fire Suppression Plows -----	5,750.00
1 ¾ ton Jeep w/plow and Pump -----	2,300.00
3 ¼ ton Jeeps w/fire Pumps -----	5,325.00
47 Ranger Pickup Trucks w/pumps -----	86,630.00
32 LWB Trucks -----	73,600.00
2 Pickup Trucks -----	3,000.00
5 Truck Tractors -----	12,500.00
6 Equipment Transport Trailers -----	13,800.00
5 Sedan Delivery Trucks -----	7,250.00
12 Light Equipment Trailers -----	1,650.00
 TOTAL -----	 \$362,196.79

**Equipment Maintenance Shop:**

The Branch of Forest Fire Control operates a central repair shop at Sumter. Much of the work done here is of a specialized nature, consisting of such jobs as pump and tank repair work and installation in connection with the pumper units used in Fire Control work. The shop also handles heavy and light repair work, including complete overhauls to heavy and light tractors and trucks.

Three Traveling Mechanics headquartered at Sumter, and working under the direction of the Supervising Mechanic, serve the entire state from mobile units in which they carry testing equipment, tools and repair parts. These men make detailed inspections to all field equipment at regular intervals and make such repairs on the spot as practicable from their trucks. A total of 208 repair jobs were handled in the Sumter Shop. The



commercial value of these jobs is \$11,520.25, and was performed at a cost of \$7,949.25, a saving of \$3,571.00 on this item alone. The Traveling Mechanics in addition to making 263 inspections, made 165 truck and tractor repairs in the field at a considerable saving.

Some of the other jobs handled by the shop force are listed as follows:

Overhauled 11 light tractors.

Assisted in the erection of two radio towers.

Rebuilt and painted completely 6 equipment transport trailers.

Rebuilt and painted completely heavy unit tractors.

Rebuilt and painted completely heavy suppression plows.

Assisted in the erection of Athens plow.

Rebuilt and painted three truck tractors.

Constructed one steel lookout tower cab.

Overhauled in field two heavy duty fire plows.

Manufactured thirteen light suppression plows.

Installed twelve tractors track systems on light tractors.

Manufactured one light suppression plow for Jeep.

Installed new pumps and tanks on five Rangers' pickups.

Manufactured and installed five hydraulically operated fire suppression plows on light crawler tractors.

Installed six sets Booster tanks on Jeeps.

Cleaned, painted and treated forty-five Booster tanks.

Equipped five 1½ ton trucks for field use.

Constructed and placed in operation a test stand for Booster pumps.

Overhauled eleven light tractors.

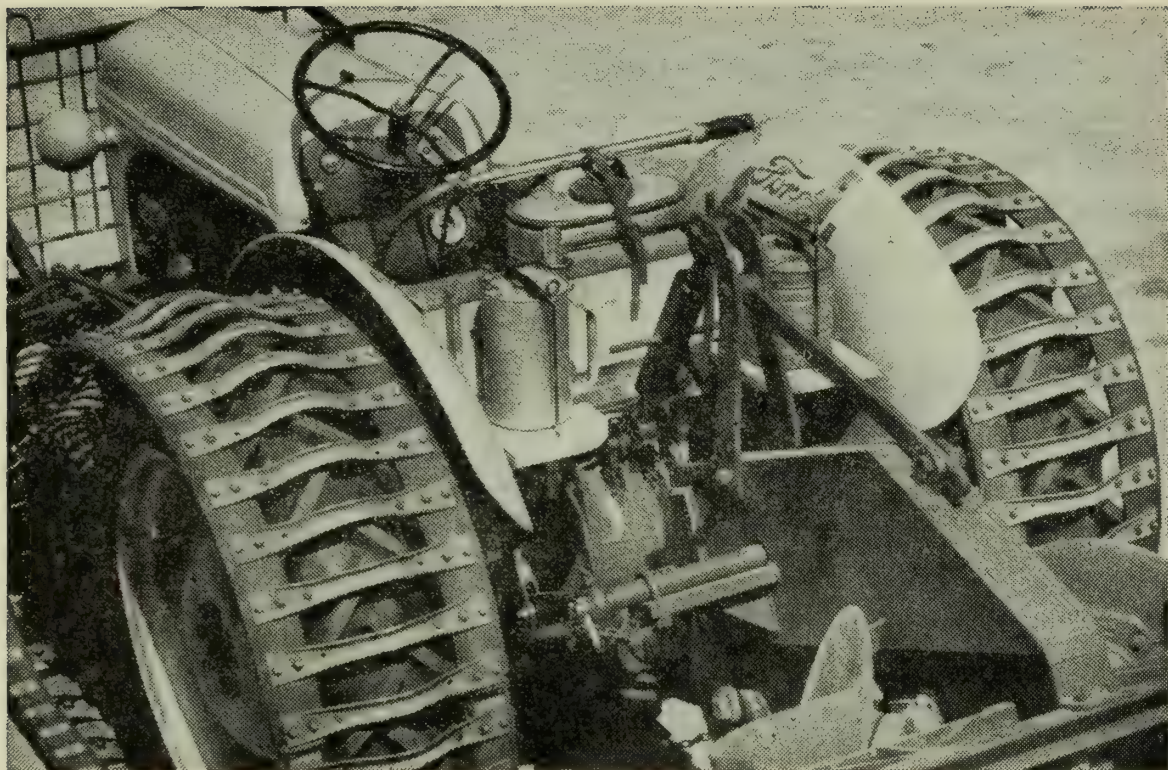
Held ten plowing demonstrations with landowner groups.

Conducted four tractor operators' training sessions.

Conducted five automotive maintenance training sessions.

### **Experimental Work:**

Funds continued limited for experimental work in the shop. Many new devices developed there during the past five years have become of real assistance in the suppression of forest fires. New types of equipment such as nozzles, chemicals, hose and other equipment offered by manufacturers are regularly tested there before purchase has been made.



Light suppression units now carry water, backfire torch and extra fuel and a specially built rack.

Experimental work was confined to the development and production of a new type steel rain gauge stand, and to the perfection of South Carolina's type C-150 plow. Negotiations were completed with two manufacturers to take over the commercial manufacture of this plow, which is now being used exclusively on light tractors in South Carolina. Several other Southern states are also purchasing and placing these plows into use. As the result of the development and demonstration of this plow, more than twenty landowners have purchased them from the manufacturers and have placed them into use for protecting their forests.

### **Warehousing:**

The warehouse is maintained near the Sumter Shops, jointly with the other branches, where supplies centrally purchased are distributed to the various county units.

### **Illegal Fires:**

A total of 6,643 illegal fires occurred during the fiscal year, burning a total of 147,840.3 acres, or 1.31% of the total forest area of the state. The average area burned per fire was 22.3



acres. February, as usual, proved to be the worst fire month of the year when 1,841 fires burned 52,288.3 acres. This represents 27.7% of all the fires which occurred and 35% of the acres burned during the entire year. It was during February, also, that the organization suppressed 937 fires in one week, the highest fire occurrence for one week in the history of the Commission of Forestry. The month of March also proved to be quite disastrous when 1,283 fires burned some 30,498.1 acres. Contrary to the usual fire season, very hazardous weather conditions and relatively high fire occurrence was experienced through the month of June. This condition was created by rather high temperatures and sub-normal rainfall during the spring season.

Orangeburg County experienced the highest fire occurrence with 608 fires which burned 16,257.6 acres, or 5.10% of the total forest area of the county. Horry County suffered the greatest acreage burned with 16,957.6 acres, or 3.04% of the total woodland area of the county. Saluda County had 27 fires, the smallest number occurring in any of the counties of the state. Hampton County suffered the smallest loss in acreage burned with only 307.3 acres. Other counties experiencing low acreage losses were Saluda County with 327.8 acres, Abbeville County with 344.4 acres, McCormick County with 390.0 acres, and Union County with 395.5 acres. Abbeville and Newberry Counties had the smallest per cent of the total forest area burned of any of the counties of the state with 0.21%. Greenville County had the smallest average area burned per fire with 4.4 acres.

### **Causes of Fires:**

Consistent with previous year's records, the greatest cause of forest fires during this fiscal year was attributed to incendiarism. A total of 2,568 fires burning 73,064.2 acres resulted from this cause. Incendiarism alone caused 38.6% of all the fires occurring in the state. A total of 1,688 fires were attributed to smokers, burning some 23,731.0 acres. Debris burning caused 1,271 fires which burned 25,326.9 acres. Inasmuch as 83% of all the fires occurring in the state were caused by incendiarists, debris burners, and smokers, the bulk of our fire prevention efforts were directed toward these sources.

### Legal Fires:

Each year, large areas of forest land are intentionally burned by landowners or their authorized agents. A total of 354 fires burning 39,041 acres were attributed to landowners desire to reduce forest fire hazards. For the production of game birds and improvement of shooting conditions, 101,085 acres were burned by some 322 fires. 179 fires burning 2,320 acres were conducted to rid timber areas and/or potential forest land of accumulated debris and rubbish. 711 fires burning 24,245 acres were burned on woodland pastures. 397 miscellaneous fires for various purposes such as boll weevil eradication, destruction of snakes, ticks, insects, etc., burned 19,383 acres of woodland area. For all purposes, a total of 1,936 legal fires burned a total of 186,074 acres of woodland area.



Protected from fire and managed according to good forestry practices, farm woodland can contribute much to the wealth and prosperity of the landowners and citizens of the state.

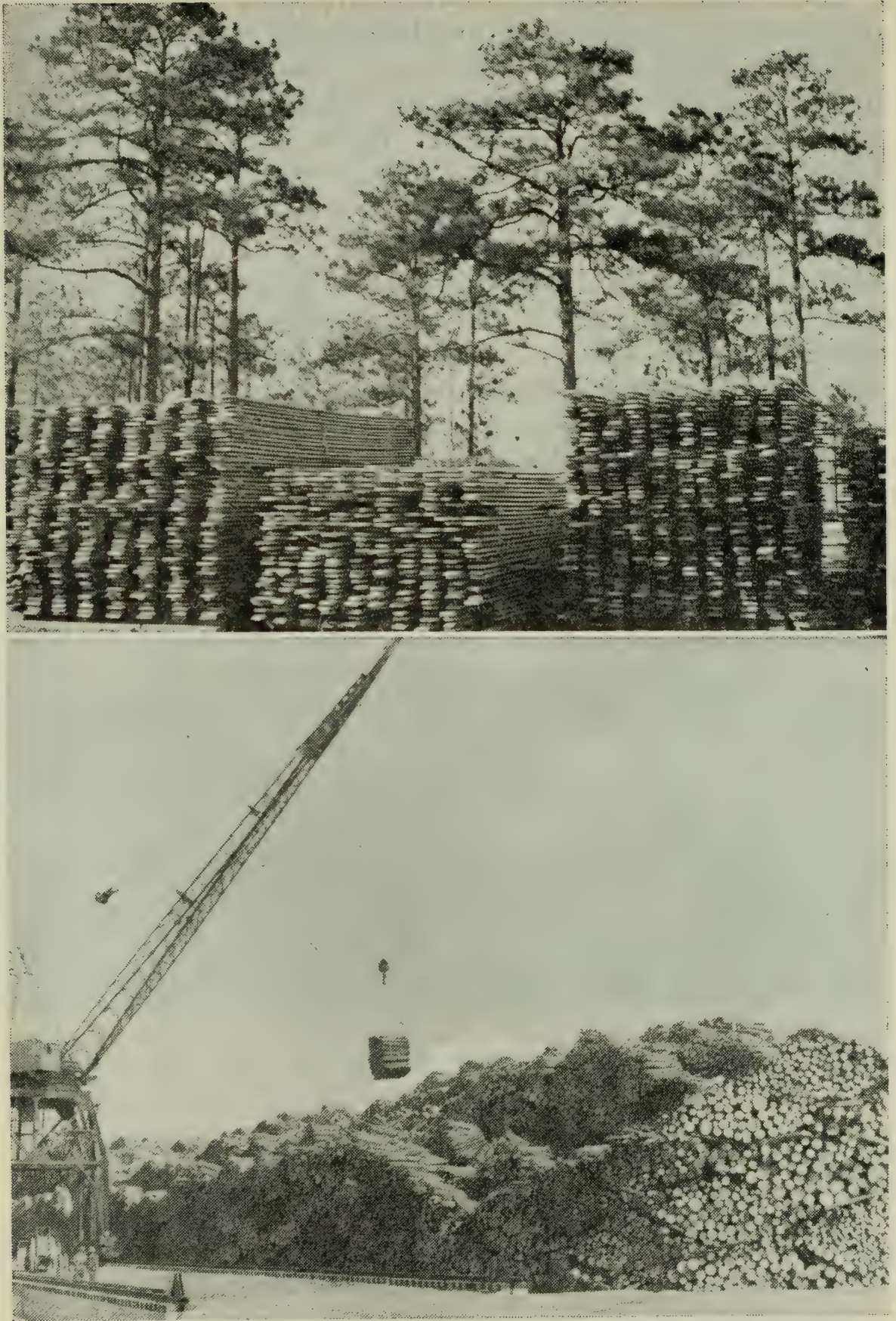
### FOREST FIRE SUMMARY

With the exception of the Sand Hills region, South Carolina experienced a fairly moderate fire season during this fiscal year. Another variation from normal occurred during the months of April, May, and June when sub-normal precipitation was experienced, thereby creating rather hazardous fire weather. Unit organization personnel were kept busy handling fires which occurred on into the summer months.



The month of February proved to be most hazardous when extremely dry weather conditions linked with high winds created very formidable burning conditions. This build-up began in January, which was recorded as the driest January since 1927 and one of the driest since 1890. The rainfall was 2.10 inches below normal. The month of February was even worse with a departure of 2.47 inches of rainfall below normal. The last week in February proved to be the worst single week since 1945. The first and last weeks of March proved to be very disastrous also. March was the only month during the last half of the fiscal year which received a normal amount of rainfall; all others varied from .3 of an inch to 2.5 inches below normal.

County unit organizations performed exceptionally well in stopping the spread of those fires which occurred, despite the hazardous weather conditions and lack of adequate equipment. Without the aid of numerous volunteers consisting of land-owners, tenants, and others, the total number of forest acres burned during the year would have been much greater.



South Carolina's forests provide the raw material for the state's second largest industry.



## FOREST MANAGEMENT

The demand for and production of all forest products in South Carolina continued at a high level during the fiscal year. With increased production the sawtimber supply has continued to be overcut in South Carolina, and the average sawtimber size tree has become smaller. It is imperative that South Carolina take the necessary action to build up forest resources and to make all forest land more productive. By increasing production we can support more forest industries in the state.

### LUMBER AND PULPWOOD PRODUCTION BY YEARS

Year	Lumber	Pulpwood
1942	1,079,351 M bd. ft.	946,000 Cords
1943	984,773 M bd. ft.	985,000 Cords
1944	850,748 M bd. ft.	1,053,500 Cords
1945	723,667 M bd. ft.	877,500 Cords
1946	1,005,700 M bd. ft.	995,700 Cords
1947	871,014 M bd. ft.	948,388 Cords
1948	798,700 M bd. ft.	1,108,523 Cords
1949	1,002,000 M bd. ft. Est.	1,012,180 Cords
1950	997,000 M bd. ft. Est.	1,000,000 Cords Est.
1951	1,000,000 M bd. ft. Est.	1,030,000 Cords Est.

Many new forest products industries began operating in South Carolina during the past year; most of these were of the small sawmill type. South Carolina woodlands are less than one-half productive and there is much to be done before the woodland area in the state can support new industries. Forest industries that possess their own land in the state showed considerable interest during the past year in stand improvement work, improved cutting practices, planting of abandoned acres, waste reduction and fire protection. Some textile companies that own land in this state also showed interest along these lines.

The Conservation departments of the larger pulp companies continued to mark pulpwood for thinning on private property. From incomplete reports received, indications are that approximately 40% of the pulpwood cut last year came from tops left from sawtimber operations or from thinnings. Less than one-third of the pulpwood cut came from clearcuttings.



Forest management activities of the State Commission of Forestry conducted to improve the forestry situation and to better all of the people of the state are explained in detail on the following pages.

### MANAGEMENT ASSISTANCE

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing technically trained foresters to help landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection and reforestation measures needed.

In cases where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a sample timber sale agreement. The charge



Selective marking and harvesting timber means maximum growth, production, and profit.



for this service is fifty cents per thousand board feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

During the year Commission foresters made 998 woodland examinations on 173,057 acres of forest land, and a total of 19,634,153 board feet and 3,896.0 cords were selectively marked for 339 landowners on 14,275 acres of forest land. The following table shows the continuous increase in woodland examination and selective marking assistance that has been rendered since 1941-42.

## SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
1950-51 .....	998	173,057	339	14,275	19,634,153	3,896
TOTALS .....	4,667	1,144,680	1,677	135,273	178,414,913	22,725.6

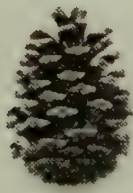
It is estimated that during the year industrial and private consulting foresters marked an additional 231,500 cords of pulpwood and 40,000,000 board feet of sawtimber on 40,000 acres of forest land. Commission foresters referred 130 jobs to private foresters during the year. These consisted of the larger tracts examined by our men.



## PINE CONE AND SEED



GREEN:  
CLOSED



OPEN:  
AFTER DRYING  
CONE



WITH  
WINGS



WINGS  
REMOVED

SEED



Thousands of bushels of pine cones are collected each year for growing millions of tree seedlings at the Horace L. Tilghman Forest Tree Nursery. These seedlings are distributed to landowners who plant them to put idle acres to work growing a new crop of trees.



## REFORESTATION

A total of 20,615,315 seedlings were distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly .....	7,222,990
Slash .....	12,556,450
Longleaf .....	742,625
Cedar .....	9,400
Arizona cypress .....	83,850
<b>TOTAL .....</b>	<b>20,615,315</b>

Of this total, all except 20,000 trees were planted in the state. The 20,000 trees shipped out of the state were for experimental purposes in exchange for trees from other states. These seedlings were distributed to 2,473 planters.

Production of trees this year was some seven million short of that planned due to the land being planted to trees two years in a row without sufficient soil building practices carried out in between. This was done in an effort to meet the increasing demand for seedlings. For tree production it is necessary that the land be sowed to some soil building crop every other year and trees grown only once every two years if these trees are to reach plantable size by December.

The General Assembly again made it possible for any landowner in the state to receive up to 3,000 seedlings free of charge at the nursery or at 50c per thousand delivered to the nearest express office. 5,575,850 seedlings were distributed free under the provisions of this act. See Tables 12 and 13 in the Appendix for a record of seedling distribution by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years:

Year	Seedlings Planted
1928-29 .....	142,000
1929-30 .....	148,000
1930-31 .....	986,000
1931-32 .....	976,000
1932-33 .....	996,000
1933-34 .....	1,031,000
1934-35 .....	7,529,000

1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600
1947-48	11,356,990
1948-49	30,338,775
1949-50	29,501,955
1950-51	20,615,315
<b>TOTAL</b>	<b>235,047,808</b>

It has been the opinion of every forester visiting our nursery that South Carolina has one of the best nurseries in the nation. The cost of producing planting stock was approximately the same as the charge for the seedlings f.o.b. nursery. Approximately sixteen million seedlings will be available for distribution during the winter of 1951-52.

This is the fourth year of nursery operations at Wedgefield. During these four years of operation, the nursery has produced and distributed 98,309,735 seedlings at an overall cost to the Commission of \$276,896.38. This includes all capital investment expenditures. The average seedling cost per thousand based on these four years of operation amounts to \$2.82.

### CONE COLLECTION

The cone crop for the fall of 1950 was considered fair. District foresters were able to secure 8,787 $\frac{3}{4}$  bushels of pine cones (2,797 slash: 1,874 longleaf: 4,116 $\frac{3}{4}$  loblolly). From these cones 6,976 pounds of seed were extracted.

In addition, 20 pounds of red cedar, 60 pounds of Arizona cypress and 3 pounds of redwood seed were purchased on the open market.



At the end of the year there were 1,440 pounds of slash, 2,418 pounds of loblolly and 1,131 pounds of longleaf seed in storage for use next year.

### FOREST SURVEY

The latest information on the condition of South Carolina's forest resources was compiled by the state and the U. S. Forest Service during 1947. There is no reason to believe that the trend indicated in this 1947 survey has changed. We are still overcutting the sawtimber sized trees and in some areas overcutting the pulpwood sized trees.

We received numerous requests during the year from industries wanting to locate in South Carolina seeking information as to where they might obtain the necessary raw materials. In many instances we were unable to suggest a suitable location due to the depletion of the growing stock. Some of the established industries, however, are beginning to use more of the hardwood species which heretofore had been considered as culls. The large pulp industries are in some cases converting so that more hardwood can be used.

In order to properly answer requests for information on available sawtimber or other forest products supplies it is necessary that we have a complete and up to date survey of the forest resources in the state. It is recommended that a survey be conducted every five years in order to keep the Commission of Forestry up to date on the condition of our timber resources. We would then be in a position to answer requests from any industry that might seek to locate in the state.

To improve the present forest conditions in the state it is necessary to establish more complete fire protection, continue or increase the present rate of planting, establish more improved cutting practices on private timber holdings, and reach more people through educational activities.

### FARM FORESTRY

During the fiscal year seven farm forestry projects were operated in the state. A summary of the farm foresters' accomplishments is included with the data for each forest district.





Selective harvesting of woodlands promotes increased growth and provides income from woodlands of the state.

### STATE FORESTS

The amount of state forest land decreased from 129,216 acres to 123,494 acres during the year due to the Aiken Forest land being returned to either former owners or to the county. The Aiken Forest land had been reduced to only a few scattered tracts which was impractical to manage economically.

Prior to acquisition by the state almost all of the land included in the state forests was heavily cut over, burned and generally misused. For that reason, it has taken a number of years in some cases to rebuild these areas to a productive condition. This job is only about half completed on most of the forests. We still have a total of 60,000 acres of unproductive land on our state forests.

The state forests are listed below:

1. Cassatt State Forest .....	462 acres
2. Harbison State Forest .....	2,202 acres
3. Manchester (Poinsett) State Forest .....	28,830 acres
4. Sand Hills State Forest .....	92,000 acres

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TOTAL .....123,494 acres

A detailed report of activities on each of the forest follows:



### **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres which is composed largely of scrub oak and open fields. No planting was done on this forest, and no fires occurred on this property during the year. Sand Hills State Forest personnel plowed the boundary firebreaks and also some interior breaks around planted stands.

### **HARBISON STATE FOREST**

Harbison State Forest comprising 2,202 acres, is located in Richland County. During the year, 379,592 board feet of sawtimber and 283.16 cords of pulpwood were marked and sold. The receipts from the sale of this sawtimber and pulpwood were used to pay the remainder due on the purchase price for the property. All outstanding obligations against this forest were paid from these receipts.

The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the caretaker. No fires burned on the area during the year. Approximately 7 miles of firebreaks were plowed on the forest by the Manchester State Forest personnel and equipment.

### **MANCHESTER STATE FOREST**

The 28,838 acres of land making up Manchester State Forest is located South of Wedgefield in Sumter County. This land is leased to the S. C. State Commission of Forestry on a long term lease from the Federal Government.

More than one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak and reclaiming it for pine production.

#### **Management Plan:**

A management plan and stand description was made for this forest in 1946-47. This plan was used as a guide in setting up what stands were to be cut, those needing silvicultural treatment, etc. It is necessary now that these stands be reclassified and a



Small-size crowded timber stands can be profitably thinned for pulpwood, fence posts, and other products. Wise harvesting helps Nature produce more timber on every acre of land.

new map made particularly so that the young stands approaching the size for a pulpwood thinning can be checked and scheduled for thinning as necessary.

### Tree Planting:

A total of 809,500 seedlings were planted on the forest during the season. Species planted are as follows:

Slash Pine .....	797,500
Longleaf Pine .....	10,000
Arizona cypress .....	2,000
<hr/>	
TOTAL .....	809,500

All of these trees were planted by machine except for a very small number used in replanting. Both the Lowther machine and a machine made by Theodore Hunter, Mechanic at Sand Hills State Forest, were used for this planting.

### Forest Products Sold:

The forest products sold during the year included the following:

Sawtimber (bd. ft.) .....	270,016
Pulpwood (Cords) .....	174.3
Lumber (bd. ft.) .....	1,098



All sawtimber and pulpwood were selectively marked prior to cutting and sold to the highest bidder.

In addition to the above, fuelwood was harvested for use of personnel on the forest and fuelwood permits were given to residents in and near the forest. Fuelwood cutting was confined to scrub oak and/or dead trees.

### **Fire Protection:**

Twenty fires burned 192.85 acres on the Manchester State Forest during the year. The fire plan for Manchester State Forest and Poinsett State Park was revised and followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining this area in the prevention, presuppression, and suppression of forest fires. The successful execution of this fire plan is probably the reason for the small acreage burned during the year.

Approximately 225 miles of boundary firebreaks and 30 miles of interior or auxiliary firebreaks were constructed and maintained. Approximately 32 miles of firebreaks were burned along the right of way of the Atlantic Coast Line and Southern Railroads in the northwestern portion of the forest.

### **Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. A detailed report on these two camps will be found in the Parks Division section of this report.

### **Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

### **Agriculture:**

Forty-four tenants rented 1,444.5 acres of land for agricultural purposes during the year. Some of these tenants work part-time

on the forest and others assist where needed in the preventing and suppressing of forest fires.

The Sumter Y. M. C. A. has leased a small area near Baxley's Pond for a boys' camp. The area consisting of 1.82 acres was surveyed in June 1951.

### **Roads and Truck Trails:**

During the year 57½ miles of truck trails were brushed out, machined and the washes filled, 4 culverts were opened up, 3 bridges were repaired and decked, and 11 diversion ditches were cleaned.

### **Telephone Lines:**

21.5 miles of telephone lines in the forest system were brushed out and 13 poles were reset during the year. General maintenance was carried on to keep the telephone system in good working order.

### **Silvicultural Practices:**

During the year 426 acres were prescribed burned for the purposes of hazard reduction, hardwood control and seed bed preparation. The burning was generally very successful. A prescribed burning plan was made for a portion of the forest and will be followed during the year. A detailed description of the method used in burning, the type of litter and undergrowth, wind conditions and other details are covered in the Annual Report prepared by the Director of Manchester State Forest.

One hundred acres west of the old river road near Melrose were cleared of wolf trees and undesirable hardwoods in advance of the tree planting machine. Scrub oak and other undesirable hardwoods were removed from approximately 183 acres in Compartment 5.

The area cleared by the Marden Duplex Brush Cutter was planted to slash pine during the year. At present the survival and growth of pines in these areas appears to be satisfactory.

Five thousand each of longleaf, loblolly and slash pine were planted in early November as an experiment. At the present time the survival is excellent for all species and all are showing good growth. Six acres of brush was cut by the Marden Duplex Brush Cutter under a scattered longleaf seed tree stand



south of Rosemary Tower last fall. The seed crop was good on these seed trees in this area; however, due to the cold weather in November killing germinated seed and the fox squirrels eating the seed, there was no satisfactory catch of seedlings. Six acres adjoining the brush cut area was brush cut and plowed with the Athens fire plow. Another six acres was plowed only. The results on all of these areas were unsatisfactory.

A similar ten acres was prescribed burned under seeds trees as a seed bed preparation, with very unsatisfactory results.

Experimental work using Ammate and 2, 4, 5T for poisoning undesirable hardwoods was done during the year.

### **Maintenance and Repair:**

At forest headquarters all buildings were repainted, the equipment shed roof was repaired, two extra rooms were built on David Thompson's house, the outside of the house was covered with imitation brick siding and the headquarters sewerage system was cleaned and repaired.

Seven tenant houses were repaired which included replacing windows, weatherboarding, roofing, pump repairs, painting.

A complete overhaul job was done on the TD-9 tractor. This included new tracks and rollers. The two-ton Chevrolet truck motor was completely overhauled. Minor repairs were made to other equipment and to the road machinery.

## **SAND HILLS STATE FOREST**

Sand Hills State Forest located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties consists of 92,000 acres. Half of the area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease agreement.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. More than one-half of the forest is scrub oak land.

### Tree Planting:

During the year 140,000 slash and 10,000 longleaf pine seedlings were planted on the forest by planting machines.

All the old fields on this forest have been planted except those suitable for renting for agricultural purposes. Planting now is done in those areas where the scrub oak has been cleared.

### Forest Products Harvested:

The following products were harvested from the Sand Hills State Forest during the year:

Sawtimber (bd. ft.—Veneer) .....	25,164
Pulpwood .....	3,567 Cords

More than 2,900 cords of the pulpwood came from a salvage operation following two severe fires. The remainder of the pulpwood and the sawtimber was selectively marked prior to cutting.

### Fire Protection:

During the year 61 fires burned 6,262.6 acres. A fire plan which had been developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield Unit Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, suppression and suppression of forest fires.

Only one of the 61 fires occurring during the past year caused extensive damage. The timber killed in this severe fire was too small to be salvaged for any commercial products.

A total of 201.4 miles of firebreaks were plowed on the forest.

### Recreation:

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area, and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees are also held here. The lake is open to fishing but no swimming is allowed.



The Parks Division continued improvement work on Campbell's Pond Negro State Park. This area received heavy use during the year. A more detailed report will be found in the Parks Section of this report.

### **Fish and Wildlife:**

Regulated quail hunting was allowed on the area during the year. Plans call for the establishment of areas for game preserves on which no hunting will be permitted. It is planned that the majority of the area in the future, however, will be open to public hunting.

Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

### **Agricultural Lands:**

20 tenants rent and farm 1,300 acres of agricultural land on the forest. All of the lands, which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

### **Silvicultural Practices:**

In addition to tree planting and actual timber harvesting, release cutting, and considerable work on the control of undesirable hardwoods was accomplished by the forest personnel.

206 acres in ten separate areas was cleared by the brush cutter under seed trees to try to obtain a catch of longleaf seedlings. The longleaf seed crop was fair to good in these areas. In late November a hard freeze, then dry weather during late spring caused a complete loss of all seedlings on these areas.

Two plots totalling 30 acres near headquarters were sprayed with an Ammate solution for the control of scrub oak. Results were very good.

160 acres of scrub oak were brush cut to be followed by a plowing operation in preparation for planting during this next year. Also, during this past spring farmers cleared 575 acres of scrub oak to plant watermelons. After the watermelons are harvested, the land will be available for forest use. Our present plans are to plant about 150 acres of this during this next planting season.

In an effort to obtain more information on how longleaf might be successfully transplanted, a seed bed was established on the Sand Hills State Forest using seed collected locally on the forest. To date the prospects are excellent. The bed is 6 feet x 50 feet and the estimated production is 30,000 trees.

Eight acres were prescribed burned for the control of the brown spot disease and results appear to be very good. Practically all trees in the burned area have started height growth and there is no evidence of brown spot recurring.

Experimental practices will continue to be carried out on this forest in an effort to determine the most economical and practical means of converting scrub oak areas into productive pine stands.

### **Maintenance and Repair:**

The Sugar Loaf Mountain Recreation Area was maintained during the year by the forest personnel. The entrance road was machined a number of times, washes filled in and the road brushed out. A hand pump was installed in the flowing well at Sugar Loaf. Signs were repainted. The buildings on the area were repainted and screen doors repaired.

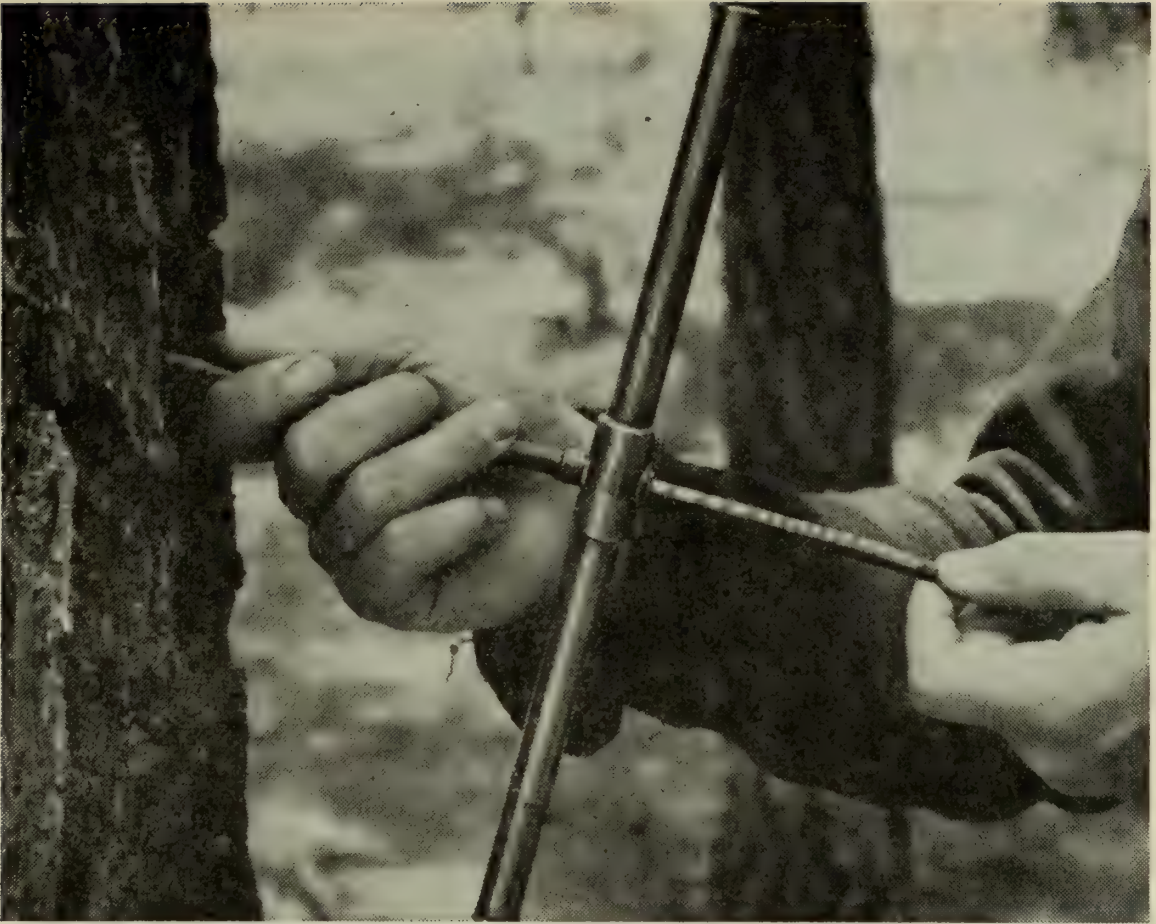
Some roof repair was made to all of the buildings at headquarters. Also, considerable repair was made to some of the big doors on the shop and garage. Most of the buildings in the headquarters area are in a good state of repair.

Miscellaneous repairs were made on practically all of the tenant residences which included roof repair, installing new parts for pumps, and in one instance drilling a new well, screen door repairs and painting.

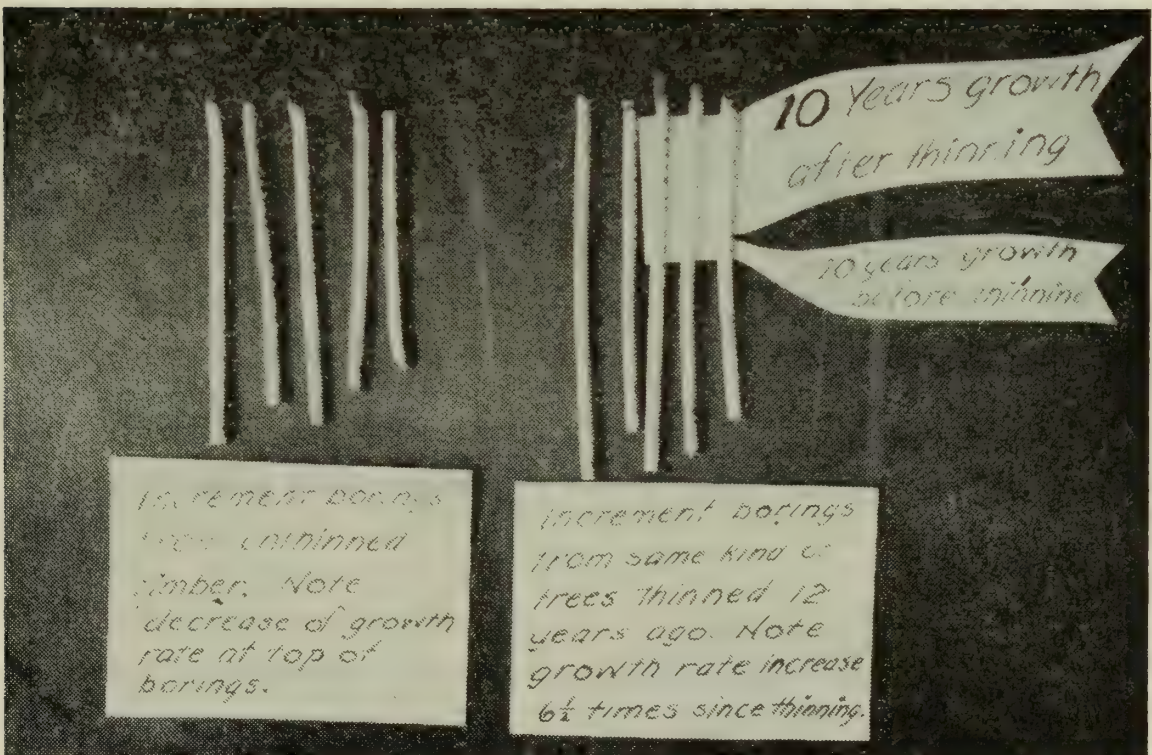
### **Boundary Surveying:**

A Cadastral Engineer sent by the Atlanta Office to continue work on boundary surveys for the forest has surveyed a number of miles of boundary lines; however, there are many more miles yet to be run to completely establish our boundaries. This surveying was concentrated on areas where there was some dispute as to the location of the Sand Hills State Forest lines.





Commission foresters use special tools for measuring growth rate of trees.



Growth rings show that trees grew  $6\frac{1}{2}$  times faster after stand was selectively marked and thinned.





Record-breaking crowds taxed facilities at most state parks during the year.



## STATE PARKS

After the close of World War II, when people tried to resume a normal way of life, including more frequent visits to State Parks, the annual attendance of South Carolina's Parks almost immediately passed the one million mark.

For last fiscal year, ending June 30, 1950, this impressive usage had exceeded, for the very first time, not only for South Carolina but for any other southeastern state, the two million count. A year later—July 1951—the attendance surpassed all previous records, and the figure for South Carolina now stands at the two and a half million park visitors!

The often repeated slogan of "Visit Your State Parks" has been heeded and the consistent returning of these park users gives evidence that the popularity of the areas is established and that the public has come to accept and enjoy State Parks.

At no time during the 15 years since the idea of State Parks for South Carolina became a reality with the opening of Myrtle Beach, Aiken and Poinsett in the summer of 1936 have such crowds descended upon these public recreation areas. The spring of 1951 saw people getting the jump on the regular vacation season and already crowding picnic tables and swimming areas, leisurely strolling along the walkways, and week-ending in vacation cabins. Never before has a season opened with such capacity crowds immediately in evidence as did 1951. Every park, from Table Rock to Myrtle Beach, from Kings Mountain to Hunting Island, had its heaviest use.

As highly gratifying as this popularity is to our department and as encouraged as we are that so many visitors continue to use these recreation and vacation areas, nevertheless comes the realization that facilities designed to carry a load of less than a million people are now being used by three times that number. Adequate replacements for the wear and tear on picnic areas, group camps, cabins, swimming lakes and beaches, roads, trails and water and sewer systems, are behind schedule. Not only are we crowding together our park visitors, but funds are not being appropriated to keep up with essential repairs, maintenance and replacements.

### **Appropriations:**

We entered the fiscal year with the smallest appropriation for an operation budget received since the war—\$235,000. When only \$235,000 is available to take care of two and a half million visitors, we have a per capita cost of 9c, and if credit is taken for the revenue turned into the State Treasurer (\$70,000), we have a net cost of approximately 6c per park visitor. These figures are so far below the national average of 19c gross, or 13c net, that they warrant serious study. We, in South Carolina, possess no special formula whereby we may maintain facilities, supply replacements, and man operations, for less than one-half the cost that other states require to do this same job.

Until we receive the full operation budget of some \$350,000 (some of our southern states have two and three times this amount with fewer parks and fewer visitors) we are passing up needed repairs and replacements. We can overlook them only temporarily, however, for a roof that begins to leak will continue to leak, and a worn out water pump will continue to break down. Even picnic areas can be completely worn out with the trampling of many feet, and the whole operation should be moved to another location.

### **Planning for Two New State Parks:**

Much time was spent in preliminary planning for two new State Parks which became a part of our system late in the year—a white park on the Little Pee Dee River near Dillon-Marion County line, and a park for Negroes in the mountains of Greenville County. Appropriations became available in the 1951-52 fiscal year for the beginning of the development of these areas. Both areas were needed to round out our system and have been recommended by the Commission for several years. An appropriation of \$50,000 was made available for the acquisition of land and the beginning of a seashore park for Negroes in Charleston County.

The twenty-one State Parks, with their acreage, location, date established or acquired, and date opened for visitors, are shown below:



Park Name	Acreage	Location-County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	867	Aiken .....	July 1934	Aug. 1936
Barnwell .....	252	Barnwell .....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield .....	March 1934	July 1939
Chester .....	523	Chester .....	May 1935	July 1939
Croft .....	7,135	Spartanburg .....	May 1949	June 1949
Edisto .....	1,255	Charleston .....	Feb. 1935	June 1937
Givhans Ferry .....	1,235	Dorchester-Colleton .....	Oct. 1934	June 1937
Greenwood .....	1,114	Greenwood .....	April 1938	July 1940
Hunting Island .....	5,000	Beaufort .....	July 1938	June 1941
Kings Mountain .....	6,141	York-Cherokee .....	Nov. 1934	June 1940
Lee .....	2,839	Lee .....	June 1935	June 1941
Little Pee Dee .....	835	Dillon .....	June 1951	Under Construction
Myrtle Beach .....	312	Horry .....	Aug. 1934	July 1936
Oconee .....	1,165	Oconee .....	July 1935	June 1937
Paris Mountain .....	1,275	Greenville .....	April 1935	June 1937
Pleasant Ridge .....	300	Greenville .....	Sept. 1950	Under Construction
Poinsett .....	1,000	Sumter .....	Aug. 1934	Aug. 1936
Rivers Bridge .....	390	Bamberg .....	May 1945	July 1945
Santee .....	2,364	Orangeburg .....	Jan. 1942	June 1949
Sesqui-Centennial .....	1,500	Richland .....	Aug. 1937	June 1940
Table Rock .....	2,860	Pickens .....	May 1935	June 1940
45,723				



This building at Pleasant Ridge State Park for Negroes is being converted for use as a cabin for overnight camping.



### **Training of Personnel:**

A program of in-service training during the year was divided into three phases: (1) a short course for park superintendents at N. C. State College in Raleigh, sponsored by the Southeastern Association of State Park Directors; (2) A course in mechanical skills for park workers arranged in cooperation with the South Carolina Area Trade School in West Columbia; and (3) A three-day annual period of instruction for all park superintendents. Ten park superintendents have been sent to Raleigh during the past two years and our representatives were in the forefront of participation with park men from ten other states. Thirteen men from a dozen parks participated in the training in carpentry, plumbing and electricity at the new trade classes.

These training programs are proving their worth not only in equipping our workers with a better "know-how" of State Park operations, but also in initiating new interest and improving morale.

### **Exchange of Lands:**

The exchange of lands between the Lewis heirs and the Commission of Forestry at the Myrtle Beach State Park area was completed after several years of negotiations. A tract separating our two former areas was acquired in exchange for a portion of our tract at the extreme southern end of our holdings. Myrtle Beach State Park now has slightly more than a mile of ocean front in an unbroken strip and a similar acreage bordering U. S. Highway No. 17.

### **Atomic Energy Area:**

A report has been compiled outlining recommended improvements to the State Parks at Aiken, Barnwell, and Rivers Bridge to take care of the increased use of these areas by people connected with the Atomic Energy Plant in Barnwell and Aiken Counties. A check made at Aiken State Park during the period of May and June indicates that 50% of the attendance was by persons connected with the new AEC area. Because these small rural parks were designed for much lighter use than can be expected for the next several years, and because federal funds are being allotted to build other facilities in the area, an outline of needs to supply the increased recreational use in these parks will be filed with proper authorities.



### **Waysides:**

On June 30th we concluded our administration of five Wayside Parks in Aiken, Greenwood, Greenville, Kershaw and Georgetown Counties, and transferred them to the jurisdiction of the State Highway Department. Administration of the Colleton Wayside Park has been retained by the Commission and plans are underway for some expansion of its facilities for the coming year.

### **Park Roads:**

The 1951 General Assembly authorized the State Highway Department to build and pave roads within the State Parks, and it is reasonable to expect that within the next few years all these areas will have hard-surfaced roads. Ten parks already have a fairly complete system of paved roads, but nine parks, other than the two new parks, need these improvements. It is interesting to note that with the single exception of Santee there is a paved highway leading to the entrance of each of the 19 established State Parks. Over these roads 616,000 vehicles traveled during the past twelve months to bring the two and one-half million visitors into the parks.

### **School Of The Air:**

A role that is truly within the function of State Parks is that of outdoor education or the interpretation and appreciation of nature and the things of nature. A radio program so designed was launched over Station WIS and seven other participating stations in February, when a School of the Air series, "The World Is So Full Of A Number of Things . . .", reached school classes during the school day.

These fifteen minute programs, written at the junior high level, were heard weekly within the classroom, until the close of the school year. The material, while factual, was interestingly told, and was intended to supplement the school study in nature and history. The series was endorsed by the Department of Education and program outlines were supplied as teacher aids to prepare classes for the broadcasts.

"The World Is So Full Of A Number Of Things . . ."—the name taken from Robert Louis Stevenson's poem—will begin a thirty-one program series over eight key stations in September.



More than 23,000 fishermen and many thousands of other visitors used the new fishing pier at Myrtle Beach State Park during the first year of operation.

### **Fishing Pier Operation:**

The fishing pier at Myrtle Beach, built last year with funds advanced by Springs Cotton Mills, had a highly successful year of operation. Some twenty thousand fishermen made use of this new facility and many thousands of other visitors inspected the pier and its weather shelter at the ocean end of the structure. The loan is being repaid from receipts from the operation of the pier.

### **Fire:**

On Sunday, April 15th, a very disastrous forest fire burned Cheraw State Park. This fire was deliberately set a few hundred yards south of the park entrance on U. S. Highway 1. Fanned by a high wind, the fire burned approximately 1,500 acres of woodland, and in addition destroyed the Laurel picnic shelter, two latrines, and the park ranger's residence, including all of his personal belongings and furniture.

### **Historical Areas:**

For several years the Commission of Forestry has had the responsibility of six historical areas in the state, but no funds were



appropriated for their care. This condition was corrected when the 1951 Legislature appropriated \$3,600 as Item 3 in the Forestry Commission's Budget for repairs and maintenance to the burial sites of General Thomas Sumter, General Andrew Pickens, Thomas Heyward, Isaac Hayne, Francis Marion and for Fort Watson. The Commission holds deed to the Sumter graveyard, and has a long-term lease for the Fort Watson area; the others are in private ownership.

## VACATION ACCOMMODATIONS

### Cabins:

The fifty-nine State Park cabins at Table Rock, Oconee, Cheraw, Poinsett, Givhans Ferry, Myrtle Beach, and Edisto Beach were reserved for the entire season by families on vacation. In addition, the off-season use of these facilities is steadily increasing and it is not unusual to find cabin users in the parks from early spring until well into the winter months.

### Group Camps:

Organized camping groups continued to use the facilities of the seven group camps at Paris Mountain, Kings Mountain, Cheraw and Poinsett. Such groups as Boy and Girl Scouts, YW



School groups make effective use of state park facilities in connection with resource-use education activities.



and YMCA's, church and school groups, and crippled children, held encampments of from one to eight weeks at these well equipped group camp areas.

Mill Creek Camp is limited to Negro groups, and is the scene of the annual Orthopedic Camp of the State Board of Health.

More and more schools are using the group camp areas. School camping on school time as a progressive teaching method has been successfully done in such states as Michigan, New York, and California. The State Parks are furnishing facilities for a beginning of this practice here. The Salisbury, N. C. school system is using Camp Cherokee, at Kings Mountain State Park, in the promotion of their program of education in the out-of-doors, and other schools use the group camp areas for holding indoctrination courses for teachers.

### OTHER FACILITIES

The operation of the refreshment stands in all State Parks was the immediate responsibility of the park personnel until this year when, acting on legislative direction, the two larger concessions at Sesqui-Centennial and Cheraw Parks were operated by the State Board of Public Welfare, Division for the Blind.

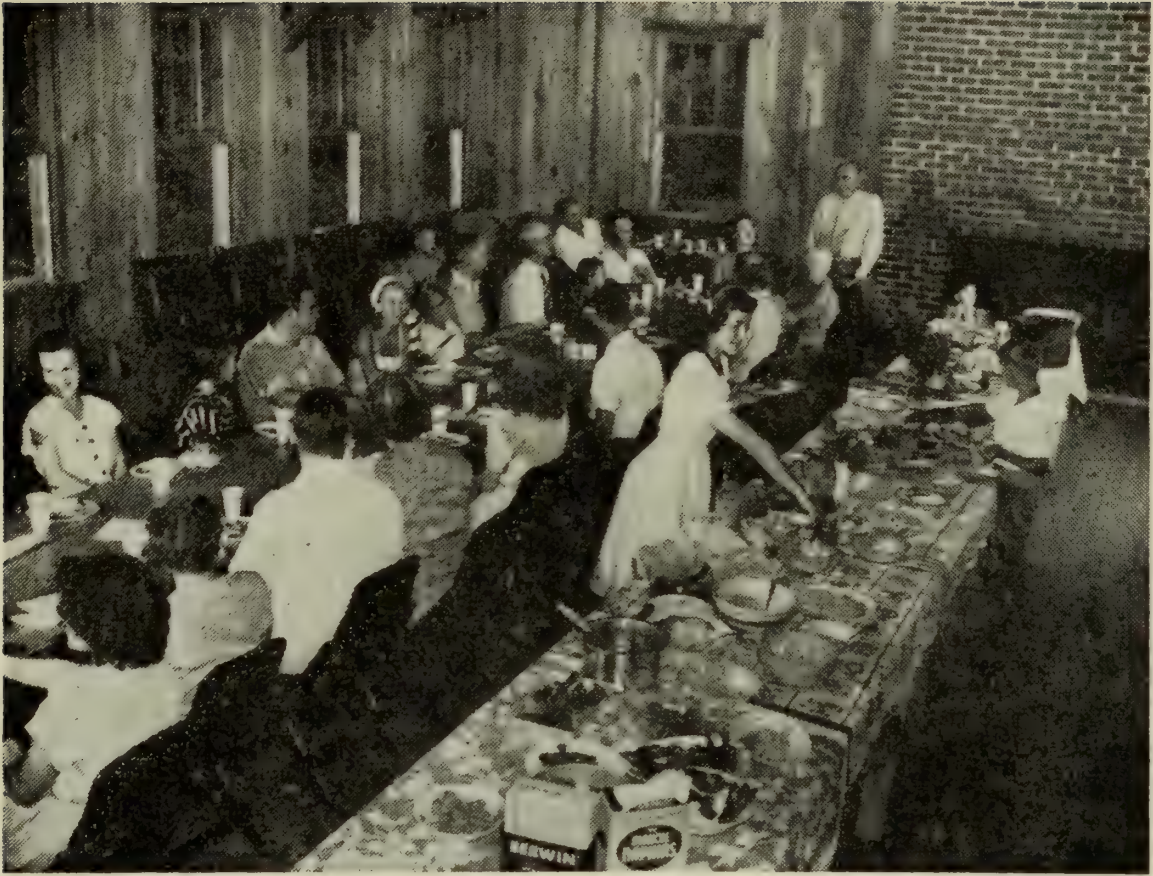
Well-appointed tea rooms are open during the season at Oconee, Table Rock and Poinsett State Park, where delicious meals may be had at reasonable prices by individuals or by club groups.

Fishing may be enjoyed at all State Parks. No charge for this recreational sport is imposed; however, boats are available at a rental fee. Established state game and fish laws apply in the State Parks.

Large, well equipped buildings for use as community centers and recreation activities are available at Barnwell, Cheraw, Chester, Givhans Ferry, Lee, Myrtle Beach, Oconee and Table Rock.

These facilities make a year-round contribution to the social life of the young people of the countryside, as well as serving as a meeting place for conventions, family reunions, day camp headquarters and general group gatherings.





Community recreation buildings at 7 state parks were used by families, schools, organizations, and other groups during the year.

### Hunting Island Beach Village:

Development of the Beach Village at Hunting Island State Park has not progressed according to anticipated schedule, due perhaps to the unsettled times and scarcity of building materials. The hundred lots leased to as many citizens of the state have seen only three houses constructed during the year and a half of their leasing. Under terms of the contract, residence must be completed within three years of date leased. Leases are for twenty years with optional renewals for ten year periods and top rentals are at the rate of \$50 per year. Developed property may be transferred from one owner to another with approval of the Commission.

A few lots facing the newly paved park road are still available for lease.

### NEGRO AREAS

An outstanding accomplishment this year was the acquisition in upper Greenville County of 300 acres of mountainous land for development as a State Park for Negroes. A local citizens



committee, composed of both white and colored members, worked in close cooperation with the Commission of Forestry in initiating the project and requesting funds for the beginning of its development.

Campbell's Pond, at Cheraw State Park, is finding increased use by Negroes from the Sandhills section, while the coastal park on Hunting Island draws large crowds to the beach. Mill Creek, at Poinsett State Park, in addition to a popular day use area, has a well equipped group camp.

Next year many improvements are planned for the Negro section of Greenwood State Park. The present site will be abandoned and a new area developed on one of the peninsulas jutting out into Lake Greenwood.

Funds were made available by the 1951 Legislature for the acquisition of land and the beginning of development of a State Park for Negroes in the coastal section of Charleston County.



Boating is a popular activity at Chester State Park.



## ACCOMPLISHMENTS BY PARKS

The physical improvements made in the State Parks during the past fiscal year were accomplished mainly by park labor with a minimum of materials. Only \$14,000 was available for purchase of repair materials, while \$45,000 is needed annually to meet the established percentage of depreciation of our buildings, installations and equipment.

Aiken—New water system to picnic and bathhouse areas.

Barnwell—Routine repairs.

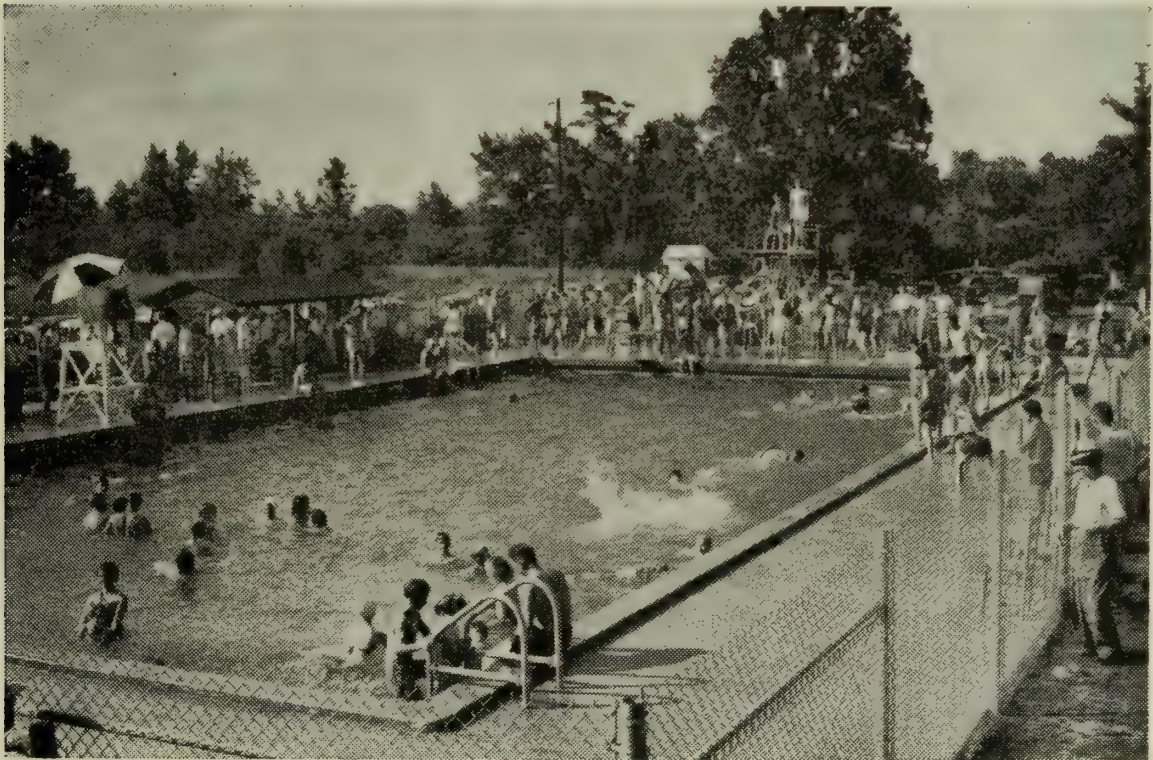
Cheraw—Re-roofed recreation building in group camps. Wired all family cabins (9) and installed electric cook stoves. (All State Park cabins now have electric stoves and electric refrigerators). Major erosion control work.

Chester—Painted major buildings. Park road paved by State Highway Department.

Croft—Enlarged picnic area to include barbecue pit, shelter and additional fireplaces. Two concrete shuffle board courts as a gift to the park.

Edisto Beach—Reconstructed picnic shelter at George's point and installed pressure water system.

Givhans Ferry—Extended water lines to Picnic Area No. 2. Kudzu control program, by plowing, burning and grazing.



Swimming pool at Rivers Bridge Confederate Memorial State Park proved a popular addition to state park facilities.

Greenwood—General repairs.

Hunting Island—Revamped water system.

Kings Mountain—Rebuilt swimming docks at the two group camps. Landscaping for erosion control. Enlarged picnic area.

Lee—Completed new Recreation Building. Power line and new water system for Recreation Building. Starting new road to swimming area and building parking area.

Myrtle Beach—Re-roofed all vacation cabins (5). Installed new electric stoves. Land exchange with Lewis to round out holding.

Oconee—Enlarged picnic area. General painting and repairing.

Paris Mountain—General repairs.

Poinsett—Enlarged picnic facilities. New picnic shelter at Mill Creek day use area (Negro).

Rivers Bridge—New kiddie pool and two sun shelters. Work center completed. Highway paved to park entrance.

Santee—Enlarged and improved picnic area. Road system improved.

Sesqui-Centennial—General repairs.

Table Rock—General repairs.

Colleton Wayside—Lights extended to River Picnic Area.

## RECOMMENDATIONS

Our recommendations to the 1952 Legislature are:

1. Make available an adequate budget for the operation of 21 State Parks, including an item sufficient to offset depreciation of buildings, installations and equipment.

2. Make available funds for permanent improvements and expansions in certain parks:

- (a) Groins to control beach erosion at Hunting Island Negro area.

- (b) Additional facilities at all Negro areas.

- (c) Following the Charleston acquisition for a Negro park, one more such area be obtained to serve metropolitan Columbia and central South Carolina.

- (d) Expansion of facilities in certain white parks, especially the new Little Pee Dee State Park, and parks whose development was halted by the outbreak of World War II.

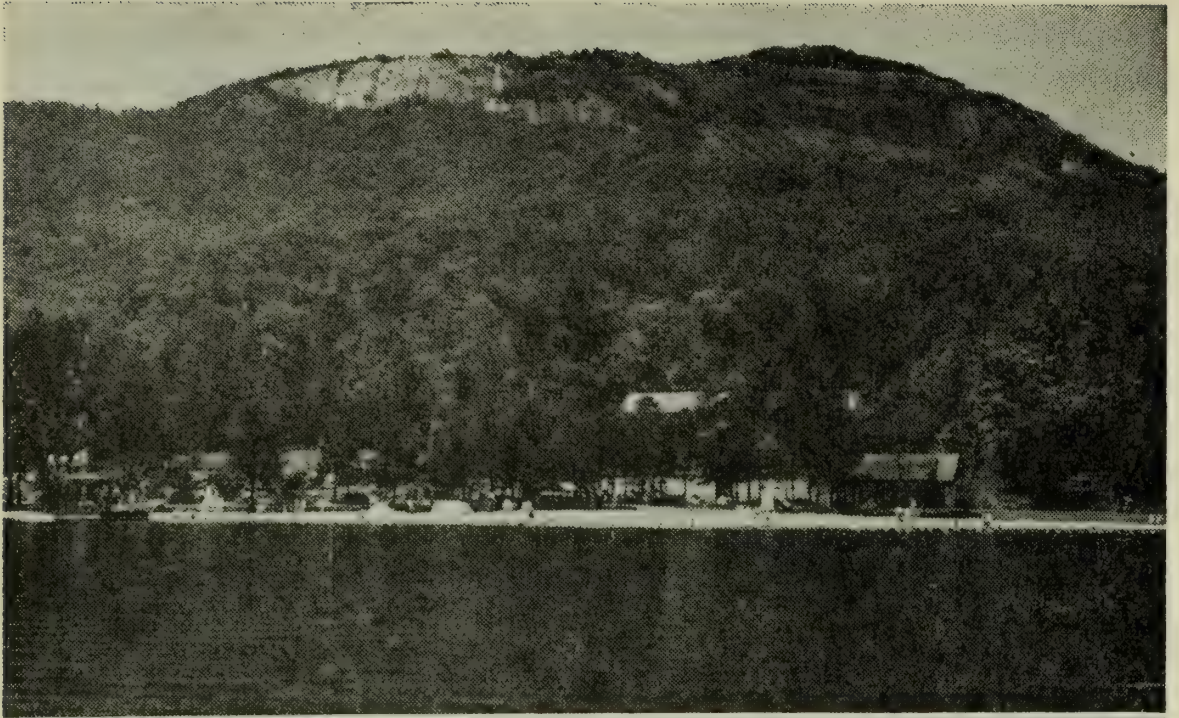


3. With the exception of another park for Negroes in central South Carolina, further acquisition of lands for development as State Parks should be considered most carefully. The only section of the state not already adequately served by State Parks is an area centering around Williamsburg County. State Parks for both white and colored are included in the Clark's Hill plans. With 21 parks already provided, South Carolina has a State Park system that compares favorably with those of other leading states.



Parking and other facilities were taxed by record-breaking crowds during the year.





From the mountains to the sea South Carolina's state parks offer healthful, wholesome recreation for every member of the family.



## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Negro Areas
AIKEN STATE PARK Windsor, S. C., RFD .....	x	x	x	x	x	x	x		x				x		x		
BARNWELL STATE PARK Blackville, S. C. ....	x	x	x	x	x	x	x				x		x		x		
CHERAW STATE PARK Cheraw, S. C. ....	x	x	x	x	x	x	x	x			x		x	x	x	x	x
CHESTER STATE PARK Chester, S. C. ....	x	x				x	x				x				x		
CROFT STATE PARK Spartanburg, S. C., RFD .....	x	x	x	x	x								x		x		
EDISTO BEACH STATE PARK Edisto Island, S. C. ....	x	x	x	x	x	x	x	x					x		x		
GIVHANS FERRY STATE PARK Ridgeville, S. C., RFD .....	x	x	x	x	x	x	x	x			x		x		x		
GREENWOOD STATE PARK Ninety Six, S. C., RFD .....	x	x				x	x						x		x		x
HUNTING ISLAND STATE PARK Frogmore, S. C. ....	x	x		x	x	x	x						x		x		x
KINGS MOUNTAIN STATE PARK Kings Creek, S. C., RFD .....	x	x		x	x	x	x						x		x	x	
LEE STATE PARK Bishopville, S. C., RFD .....	x	x	x	x	x	x	x		x		x		x		x		
MYRTLE BEACH STATE PARK Myrtle Beach, S. C. ....	x	x		x	x		x	x		x	x		x		x		
OCONEE STATE PARK Walhalla, S. C., RFD .....	x	x	x	x	x	x	x	x			x	x	x	x	x		
PARIS MOUNTAIN STATE PARK Greenville, S. C., RFD .....	x	x	x	x	x	x	x						x	x	x	x	
POINSETT STATE PARK Wedgfield, S. C. ....	x	x	x	x	x	x	x	x				x	x		x	x	x
RIVERS BRIDGE CONFEDERATE MEMORIAL STATE PARK Ehrhardt, S. C., RFD .....	x	x		x	x	x	x						x		x		
SANTEE STATE PARK Elloree, S. C., RFD .....	x	x				x	x										
SESQUI-CENTENNIAL STATE PARK Columbia, S. C., RFD .....	x	x		x	x	x	x						x		x		
TABLE ROCK STATE PARK Pickens, S. C., RFD .....	x	x		x	x	x	x	x			x	x	x		x		

Note: For overnight CAMPING, write in advance to Park Superintendent.

\* Where no regular Barbecue Pit and shelter are established temporary arrangements can be made at all Parks.





The State Commission of Forestry exhibit at the 1950 State Fair contained 3-sided panels which rotated to bring messages on forest protection, forest management, and forest planting. An exhibit featuring state park locations and facilities was also displayed.



## PUBLIC RELATIONS

Getting forestry and state park information to the people of South Carolina is the responsibility of the Public Relations branch of the Commission. We can expect to produce the maximum amount of timber on each acre of woodland in South Carolina only when all the people of our state understand forest values and clearly see how bad forestry practices like woods burning and destructive cutting can hurt them and how good forestry practices can bring about a higher standard of living for every person in the state, whether he owns forest land or not.

To do this tremendous educational job, to get each person in South Carolina to appreciate forest values, and to ultimately give South Carolinians a better way of life through forest conservation, each employee of the Commission has certain public relations responsibilities in connection with his regular duties. Employees make personal contacts, write news releases, hold forestry demonstrations, make talks, show motion pictures, help with FFA school forests and carry on many educational activities for school and adult groups.

At the district fire control training meetings held during the year, district and unit personnel received additional training to make their fire prevention activities more effective.

Excellent progress has been made in all phases of the Commission's program of information and education and there are many indications of increased interest in forestry and state park activities. Newspapers, magazines and radio stations accepted and used more material prepared by Commission personnel than ever before. Civic, Church, school and other groups requested more speakers on forestry and state parks than ever before. Woodusing industries, Garden Clubs and other groups requested more forestry educational exhibits than ever before.

South Carolina led the nation in the acreage of Tree Farms certified during 1950. In January 1951 the "More Trees for South Carolina" project was launched to intensify efforts to acquaint South Carolinians with the value of the state's forests.

During the year the Public Relations branch cooperated with private industries in the production of materials to be used for fire prevention and the promotion of good forestry practices. These included demonstrations, exhibits, publications, pocket

calendars, rulers with fire prevention messages, etc. Cooperation with other organizations and agencies to promote an understanding of forest values and good forestry practices proved to be extremely effective and mutually beneficial.

At the close of the fiscal year, it was decided to change the name of the Public Relations branch to the branch of Information and Education. This was done to bring the title in line with similar branches in other states and also to more accurately describe the activities of this branch of the Commission.

The following is a more detailed explanation of the many educational activities that are carried on by the Forestry Commission :

### **COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN**

South Carolina again took part in the National Cooperative Forest Fire Prevention Campaign. Colored posters, bookmarks, blotters, stamps, window cards, radio platters and other materials carrying fire prevention messages are prepared as a public service by a large advertising agency cooperating with the Advertising Council, Inc. and are distributed to all the states through the U. S. Forest Service. This material is then distributed by the Forestry Commission, Clemson College Extension Service, the U. S. Forest Service and the American Red Cross. These agencies are given excellent support by newspapers, radio stations, schools, churches, civic organizations and other groups.

For several years it was felt that Cooperative Forest Fire Prevention material, though good, was not "selling" fire prevention as it should, because it was generalized to fit conditions in all states. Through the efforts of the Southern Information and Education Chiefs of the individual state forestry departments, the material is now being localized. During the year, one publication, "Smokey Bear's Story of the Forest", prepared for use in the South, was distributed to every second grade pupil in South Carolina. A series of 13 radio programs featuring "Jelly Elliott and the Three Knotheads", which originated in the South, was produced and distributed nationally during the year as part of the National Cooperative Forest Fire Prevention Campaign. This second series received a national award as an outstanding public service radio program series.

In order to make CFFP Campaign materials more effective in the South, Clint Davis, of the U. S. Forest Service, who is Di-





Posters and other materials are distributed in connection with the Cooperative Forest Fire Protection Campaign.

rector of the National Campaign, and Ervin Grant, advertising executive of the Foote, Cone and Belding Advertising Agency, which volunteers services in preparing material for the Cooperative Forest Fire Prevention Campaign, attended a two day meeting with the Southern Information and Education Chiefs to make plans for the coming year. An inspection trip to see local problems and conditions was arranged by the Commission. It is felt that this groundwork will pay large dividends in making fire prevention materials more effective in the South.

The following table shows the distribution of CFFP materials made during the year.

#### Distribution of Fire Prevention Materials

Posters .....	12,252
Leaflets and Pamphlets .....	31,024
Stamps .....	148,179
Bookmarks and Blotters .....	88,538
Other Prevention Material .....	17,108
<b>Total .....</b>	<b>297,101</b>

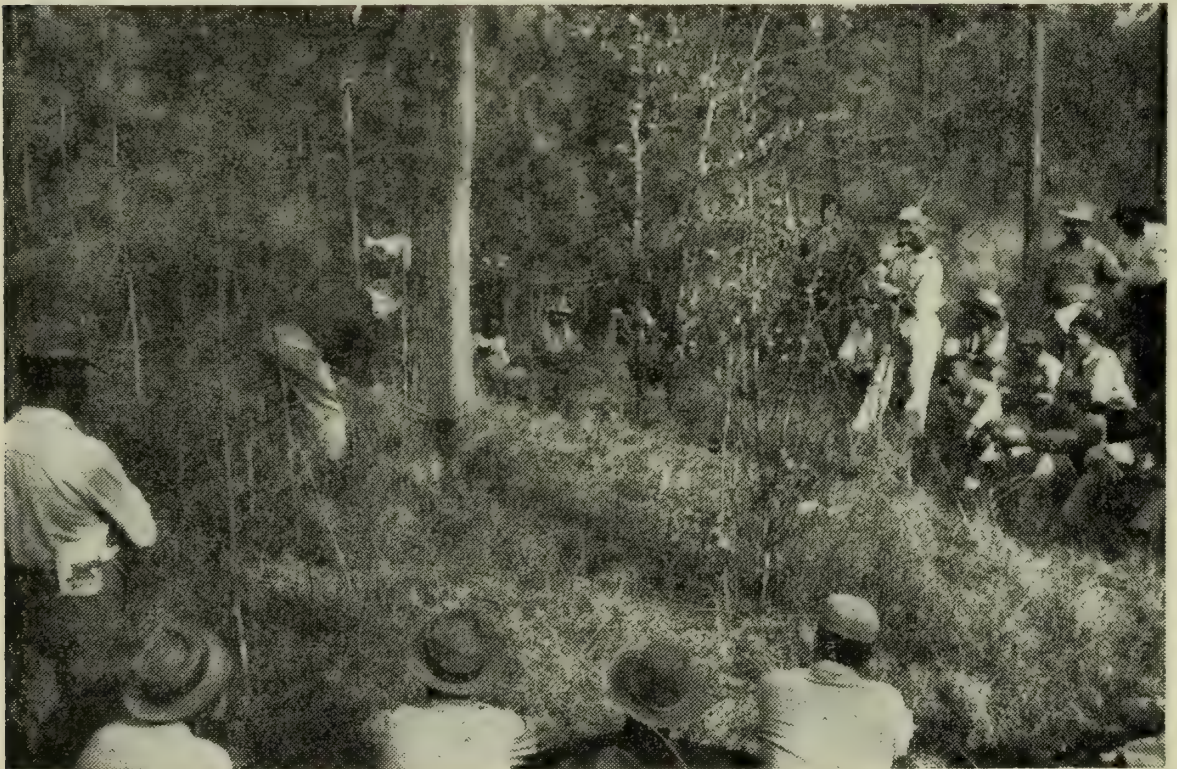


## MORE TREES FOR SOUTH CAROLINA

The "More Trees for South Carolina" project, aimed to create more income for owners of woodland and a continuing supply of raw materials for the woodusing industries of the state was launched in January. The project is sponsored by the American Legion, Department of South Carolina, and American Forest Products Industries, Inc., in cooperation with organizations, associations, landowners, and industrial groups interested in the best development of the forest lands of the state.

Cooperators include the S. C. State Commission of Forestry, Clemson College Extension Service, the lumber, pulp and paper, and other industries, Vocational Agriculture Division of the State Department of Education, industrial foresters, woodland owners, and others interested in forestry.

A series of ads, editorials, and news articles appeared in every paper in the state, and motion picture film trailers were shown by County Agents, foresters, and others to announce the project. Some 120,000 copies of a booklet "Cash Crops from South Carolina Woodlands" were printed for mailing to landowners, American Legion members and others. More than 600 people have already returned the card enclosed with each booklet asking for further information on forestry. These requests are being han-



Forester demonstrates various methods of controlling undesirable species at a "More Trees" demonstration.



dled by foresters of the pulp and paper industry, the Commission, and the Extension Service. A series of forestry demonstrations, started in connection with this project, will be continued in the fall.

This project has created much interest in forestry in a number of communities, and the project will continue during the coming year with demonstrations, illustrated talks, and providing landowners with forestry assistance.

### FORESTRY DEMONSTRATIONS

Demonstrations are an excellent way of getting forestry information before the people. During a demonstration, the actual forestry practice, whether it be fire control, reforestation, cutting or other activities, is carried out on the ground. For example, if the demonstration concerns planting, the group is taken through the planting process step by step with demonstrations and explanations. To complete the demonstration, printed material on planting is given each person present. Demonstrations on other phases of forestry are conducted in a similar manner.

During the year, 1,194 persons attended 75 demonstrations conducted by personnel of the Forestry Commission on forest fire protection, correct cutting methods, reforestation, and other forestry activities.

### CONSERVATION WEEK

Conservation week is the one week during the year that is especially set aside to call to the attention of all our people the necessity of wise use of all our natural resources. Governor J. Strom Thurmond proclaimed the week of November 26 to December 12, 1950 as Conservation Week, with Friday, December 1 of that week, as Arbor Day.

Many people, agencies, and organizations cooperated to make Conservation Week a success. The Garden Clubs and the Federated Women's Clubs of South Carolina sponsored the observance of Conservation Week with the Commission of Forestry. Clemson College Extension Service, the Soil Conservation Service, the State Department of Education, newspapers, radio stations, and other groups cooperated in placing the problem of Conservation before the people of South Carolina.

# Forestry and Park Notes

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No. 4

## YOUR PROGRAM PAGE

### ARBOR DAY PROGRAMS

SONG (one): "America"; "America, the Beautiful"; "Trees"; "God Bless America"; "Made of Wood".

INVOCATION.

SCRIPTURE READING (one): Joel 1:19-20; Isaiah 5:24; Exodus 22:6; Isaiah 44:14; others, or selected passages from "Forest and Flame in the Bible".

READING: Governor's Conservation Week Proclamation.

POEM (one): "The Tree Planter", Stanley Foss Bartlett; "A Forest Recessional", after Kipling; "Requiem", Irene Welch Grissom; "Pine Needles", William H. Hayne.

MUSIC: Arrange for special music to add variety in case bad weather postpones tree planting ceremony.

ESSAY: "Why We Should Prevent Woods Fires" (an original essay to be prepared by a pupil or member of group).

TALK: "The Importance of Trees to Everyone" (by some informed guest speaker).

RECITATION: "Why We Keep Arbor Day"—for seven children.

READING: "An Arbor Day Tree"—for four small children.

ADDRESS: Mayor or distinguished guest.

CEREMONY: Planting the tree and dedication of the tree or forest. (Suggestion: Have the hole dug before program is to start.)

SONG: One of the above—music furnished by high school band.

BENEDICTION.

Note: Prepare your own program from the poems and songs found elsewhere on program page.

### THE TREE PLANTER

Whoever planted rows of trees  
Beside the roads and lanes,  
God rest his soul in Heavenly peace  
And bless him for his pains;  
For he who gave of time and toil,  
Who gave of heart and hand  
To nurse the tender shoots that were  
To shade the ways of man,  
Was quite as great as those who built  
Of stone and minted gold—  
No need to cast his name in bronze,  
His deeds need not be told.

—STANLEY FOSS BARTLETT,  
*American Forests*

### PINE NEEDLES

If Mother Nature patches  
The leaves of trees and vines,  
I'm sure she does her darning  
With the needles of the pines.  
They are so long and slender  
And sometimes, in full view,  
They have their thread of cobwebs,  
And thimbles made of dew.

—WILLIAM H. HAYNE.

### The Governor's Proclamation

(Conservation Week and Arbor Day)

WHEREAS, our forests and forest products are essential to the livelihood, well-being and recreation of the citizens of the state, and

WHEREAS, our forests are one of the few renewable natural resources, and

WHEREAS, one week of each year has been set aside as Conservation Week, with Friday of that week as Arbor Day, and

WHEREAS, the Garden Club and the Federated Women's Clubs in cooperation with educators, schools, churches, civic organizations, patriotic organizations and others have annually sponsored Conservation Week, devoting their activities to programs concerning conservation of the forests, soil, water, scenic and wildlife resources;

NOW, THEREFORE, I, J. Strom Thurmond, Governor of the State of South Carolina, do hereby proclaim November 26 to December 2, inclusive, as Conservation Week and do call attention to Arbor Day, which by South Carolina law is Friday, December 1, and respectfully urge every citizen to exercise thought and effort in conserving our natural resources and increasing the productivity of our forests through wise use.

Given under my hand and Seal this 18th day of November in the year of our Lord, Nineteen Hundred and Fifty.

/s/ J. STROM THURMOND, Governor.

CONSERVATION WEEK						
NOVEMBER						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		
DECEMBER						
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						
ARBOR DAY—FRI. DECEMBER 1						

Each year a special edition of Forestry and Park Notes is prepared for Arbor Day and Conservation Week observance by schools.

Realizing that special school materials would be needed during Conservation Week, the Forestry Commission prepared a special issue of "Forestry and Park Notes". This was distributed to schools, churches, civic and patriotic organizations and other interested groups.

Personnel of the Forestry Commission and other groups gave numerous talks at meetings held during Conservation Week.



Many of the Conservation Week and Arbor Day programs included tree planting exercises.

A total of 1,275 Conservation Week and Arbor Day programs were held, with 124,468 persons attending.

### TOWERSITE IMPROVEMENT CONTEST

The annual tower site improvement contest is held to encourage a complete "live-at-home" program, and to improve and develop the small areas of state-owned land that make up the tower sites, located over the state.

Because of the necessity of locating towers on high points, many tower sites are on poor unproductive land. The contest has encouraged towermen to build up, develop and beautify even the worst of these areas, while, at the same time, making a better living for his family and himself.

During the year, the towermen and their families plant flowers, grass and shrubs, grow and can vegetables and fruit, raise livestock and poultry, keep the towers and other buildings clean and in good condition as well as keeping a sharp lookout for woods fires.

This year the following winners were selected:

William H. Bishop, Cane Branch Tower in Colleton County, 1st State Prize.

Mrs. Adell Adams, Saluda Tower in Saluda County, 2nd State Prize.

G. Percival Kolb, Black River Tower in Sumter County, 3rd State Prize.

Mrs. Elizabeth L. Burgess, Cleveland Tower in Greenville County, 4th State Prize.

Each of these towermen also won first prize in the contest in the forestry district in which the towers are located.

Other district winners were:

Mrs. Susie V. Bates, Calhoun Tower, Calhoun County, 1st Aiken District prize; Mrs. W. W. Watts, Sampit Tower, Georgetown County, 1st Kingstree District Prize; E. B. Wilson, Philadelphia Tower, Darlington County, 1st Florence District Prize; Mrs. Eva C. McCoy, Bonneau Tower, Berkeley County, 2nd Kingstree District Prize; Mrs. Thelma Garvin, Adams Run Tower, Charleston County, 2nd Walterboro District Prize; Eli-

jah Sanders, Catchall Tower, Sumter County, 2nd Camden District Prize; Mrs. Eva Lee Cope, Appleton Tower, Allendale County, 2nd Aiken District Prize; James Fannon, Kelly Tower, Union County, 2nd Spartanburg District Prize; Mrs. R. C. Timmerman, Epworth Tower, Greenwood County, 2nd Newberry District Prize; Ernest L. Simmons, Marion-Gresham Tower, Marion County, 2nd Florence District Prize.

### **MOTION PICTURES**

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement lectures or talks.

Each district office is equipped with a motion picture outfit complete with screen and sound apparatus.

Films on forest fire control, forest management reforestation and other forestry subjects were shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

During the year 371 showings were made to 24,316 people.

### **VOCATIONAL AGRICULTURE SCHOOL FORESTS**

An excellent means of getting forestry information before many people is through the school forest program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. For several years forestry training schools were held for all vocational agriculture teachers in the state. They learned the latest methods of forest fire protection, reforestation and forest management at these training sessions conducted by personnel of the State Commission of Forestry. The teachers have carried the information back to their students who use it in their work on school forests and on home forestry projects.

School forests are excellent aids in teaching forestry. They are outdoor classrooms where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut—which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. He takes the information





School Forest projects are conducted in cooperation with teachers of vocational agriculture.

home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them, as well as all members of their families, strong conservationists.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes.

The Forestry Commission sponsors the School Forest Contest, awarding modest prizes to the schools and teachers who have the best school forests. The FFA student in each county having the best home forestry project was rewarded with a free trip to the Commission-sponsored Boys' Forestry Camp.

The following schools were awarded prizes in the contest:

Fletcher Memorial High School in Marlboro County won first place school forest prize for the lower state division.

Jonesville High School in Union County won first place school forest prize in the upper state division.



Walterboro High School won the lower state second prize.

Edgefield High School and Blackstock High School tied for second place in the upper state area.

The goal of the Forestry Commission and the Division of Vocational Agriculture is to have at least one school forest in each county in the state. They are invaluable as demonstration areas and teaching aids and they stimulate much interest among the people of the community. In some cases delegations of townspeople have gone to agriculture teachers and have asked for a detailed explanation of the activities being carried on on the forest.

### RESOURCE-USE EDUCATION

The Resource-Use education movement has stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the State Parks for this purpose. It has been demonstrated that using these facilities and camping on school time creates a very effective teaching situation.

The State Commission of Forestry welcomes this instructional use of state parks, and Commission personnel cooperated with several groups during the year to develop worthwhile projects in day camping and school camping at the state parks.

For the third consecutive year Commission personnel participated in conservation workshops held at Clemson College during the summer school term. Here teachers learned fundamental conservation concepts and were urged to put these lessons into practice in their classrooms during the coming school year.

### TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry before many groups. The quality of talks improved considerably during the past year due to training and the use of the colored slides with the talks undoubtedly made the talks much more interesting. The Commission's Branch of Public Relations has over 1,500 colored slides on various phases of forestry and state park activities. The slides are available to all members of the organization and they have been used to illustrate talks and lectures as well as for training aids during personnel training sessions.





Commission foresters cooperate with schools and other agencies in Conservation Workshops and resource-use education activities.

During the year a total of 1,226 talks were made by Forestry Commission personnel to 51,259 people. Garden Clubs, church groups, school groups, civic and patriotic organizations were among those requesting talks.

## RADIO

Radio is becoming more and more valuable in getting forestry and park information and problems to the people. No other means can get emergency information to the people as quickly as can radio. During the past fire season it was necessary in some instances, that the people of the state know the fire conditions immediately. In many cases information was given radio stations by telephone and in a matter of minutes it would be on the air. Cooperation such as this is invaluable. Flashing emergency information to the people is just one of many ways that radio has been helpful and useful to the Forestry Commission. Several districts have regular educational radio programs. All districts have used radio to some extent. This year more rangers



than ever before utilized radio to bring information on forestry to people in their counties.

As Commission personnel become more experienced in radio work, undoubtedly the programs will become more informative and interesting and will, of course, become a more effective educational tool.

An outstanding example of the use of radio was the airing of the "Jelly Elliott" recorded series. This series concerned fire prevention generally and ran for 13 weeks on 20 radio stations in the state. This excellent coverage is an indication of the fine cooperation given the Commission by radio stations.

A new 12 program 15-minute broadcast series entitled "The World Is So Full Of A Number Of Things" was broadcast for the Division of State Parks over 8 radio stations in South Carolina. The programs were designed to acquaint school children in their classes with historical and natural facts about the State Parks of South Carolina.



The new Jelly Elliott series of 13 recorded programs were broadcast by 20 radio stations in South Carolina.





Elementary school children form an interested audience for the new Ranger Parks radio programs in nature and conservation.

## EXHIBITS

Requests by county fair organizations, Garden Clubs, church school and other groups for educational forestry and park exhibits was greater than ever before. Forestry Commission personnel welcomed the numerous requests for these exhibits because they provide an excellent opportunity for placing forestry and park information before the people.

The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits in an effort to attract the attention of people attending fairs, expositions and special gatherings.

Until recently, an exhibit was rarely requested except for state and county fairs. During this year, Garden Clubs and other groups requested exhibits at intervals throughout the winter and spring. This is an indication of interest in forestry by various groups of people.





Exhibits and displays are prepared for parades and other special occasions.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and park information through personal contacts by Commission personnel on duty and through the distribution of literature.

The following is a record of exhibits displayed:

RECORD OF EXHIBITS 1950-51		
Location of Exhibit	Type of Exhibit	Estimated Attendance
County Fairs:		
Pageland (Chesterfield)	"It Takes Men to Fight Forest Fires"	8,000
Moncks Corner (Berkeley)	"It Takes Men to Fight Forest Fires"	5,000
Chester	"Look at the Difference"	13,000
Chester (c)	"Woodlands That Pay"	8,000
Easley	"Forest Enemy Number I—Fire"	7,500
Union	"Woodlands That Pay"	20,000
Greenwood	"Forest Enemy Number I—Fire"	110,000
McCormick	"Join the Fire Fighting Team"	4,200
Rock Hill (York)	"Look at the Difference"	40,000
Spartanburg	"Woodlands That Pay"	200,000
Camden (Kershaw)	"Equipment Saves Time and Timber"	20,000
Lancaster	"It Takes Men to Fight Forest Fires"	8,000
Lancaster (c)	"It Takes Men to Fight Forest Fires"	4,000
Kingstree (Williamsburg)	"Equipment Saves Time and Timber"	8,000
Loris (Horry)	"Equipment Saves Time and Timber"	12,000
Marion	"Look at the Difference"	25,000
Anderson	"Forest Enemy Number I—Fire"	100,000
Anderson (c)	"Forest Enemy Number I—Fire"	25,000
Newberry	"Woodlands That Pay"	20,000



Location of Exhibit	Type of Exhibit	Estimated Attendance
Walterboro (Colleton) .....	"Equipment Saves Time and Timber" .....	7,000
Bishopville (Lee) .....	"It Takes Men to Fight Forest Fires" .....	9,000
Bishopville (c) .....	"It Takes Men to Fight Forest Fires" .....	5,000
Sumter .....	"Protect Little Trees"; "Planted Pines Pay"; "Wise Harvesting Pays" .....	30,000
Sumter (c) .....	"Protect Little Trees"; "Planted Pines Pay"; "Wise Harvesting Pays" .....	20,000
Laurens .....	"Join the Fire Fighting Team" .....	20,000
Charleston .....	"Equipment Saves Time and Timber" .....	25,000
Charleston (c) .....	"Equipment Saves Time and Timber" .....	19,000
Manning (Clarendon) .....	"Look at the Difference" .....	6,000
Pickens .....	.....	19,000
Seneca (Oconee) .....	"Join the Fire Fighting Team" .....	8,500
Total .....	.....	806,200

**State Fair:**

Columbia .....	"Protect Little Trees"; "Planted Pines Pay"; "Wise Harvesting Pays" .....	200,000
Columbia (c) .....	"Protect Little Trees"; "Planted Pines Pay"; "Wise Harvesting Pays" .....	80,000
Total .....	.....	280,000

**Exhibits Other Than County or State Fairs:**

Gantt Station (Greenville Co.) .....	"Forest Enemy Number I—Fire" .....	500
Clemson (Agricultural Fair at Clemson College) .....	"Forest Enemy Number I—Fire" .....	5,500
Florence (Eastern Carolina Agri. Fair) .....	"Protect Little Trees"; "Planted Pines Pay"; "Wise Harvesting Pays" .....	60,000
Florence Pee Dee Fair (c) .....	"Protect Little Trees"; "Planted Pines Pay"; "Wise Harvesting Pays" .....	15,000
West Va. Tree Farm Dedication (Berkeley County) .....	"Look at the Difference" .....	400
Timmons ville (Flower Show) .....	.....	1,000
Walhalla (Centennial Exposition) .....	"Seed to Sawmill" (Automatic Slide Projector)	4,500
Myrtle Beach (S. C. Auto Dealers Association) .....	"Visit Your State Parks" (Automatic Slide Projector) .....	700
Charlotte, N. C. (S. C. & N. C. Recreation Societies) .....	"Camping in S. C. State Parks" (Automatic Slide Projector) .....	500
Columbia (Palmetto Council ACA) .....	"Camping in S. C. State Parks" .....	50
Marion (Fall Farm Festival) .....	"Seed to Sawmill (Automatic Slide Projector)	15,000
Conway (Sixth Annual Farmers Day) .....	"Horry County Firebreak Unit Float" .....	4,000
Aiken (Cotton Festival) .....	"Float—Wood Products from S. C. Forests" ..	6,000
Columbia (State-wide Fire Preven- tion Week) .....	"Parade—5 jeeps, heavy unit, light unit, and ranger's truck" .....	10,000
Asheville, N. C. (Carolina Lumber Dealers Ass'n) .....	"Woodlands That Pay" .....	500
Spartanburg (Daffodil Flower Show) .....	Automatic Slide Projector .....	1,600
Columbia (Palmetto Garden Club) ..	"State Parks Welcome You" and "Planted Pines Pay" .....	300
Charleston (Boy Scout Meeting) .....	"Look at the Difference" and "From Seed to Sawmill" .....	1,500
Allendale (Garden Club Exhibit) ..	"Wise Harvesting Pays" .....	500
Barnwell (Green Thumb Garden Club) .....	"Automatic Slide Projector" .....	500
Williston-Elko (Community Fair) .....	.....	1,500
Rhems-Tree Farm Dedication (Williamsburg Co.) .....	.....	200
Tuxberry-Tree Farm Dedication (Berkeley Co.) .....	.....	175
Florence (Fire Prevention Parade) ..	Equipment, float .....	8,000
Myrtle Beach (Boy Scout Jamboree) ..	Equipment, and photos .....	1,200
Mt. Pleasant (Flower Show) .....	Poster exhibit, fire protection .....	500
Springtown Fair (c) .....	Poster exhibit, fire protection .....	4,000
Greenville (American Legion Fair) ..	.....	25,533
Aiken (WOW) .....	"Join The Fire Fighting Team" .....	6,000
Darlington (Flower Show) .....	.....	15,000
Colleton County Jubilee (w & c) .....	.....	7,000
Total .....	.....	197,158

GRAND TOTAL .....1,283,358

## SOUTHERN INFORMATION AND EDUCATION CHIEFS

An informal organization made up of assistant state foresters in charge of information and education activities in the forestry agencies of thirteen southern states has contributed significantly to the development of effective regional material such as posters, leaflets and exhibits.

One of the products of this cooperative effort was the distribution of a child's picture story book "Smokey Bear's Story of the Forest", to every second grade student, white and negro, in South Carolina. A series of standardized exhibits, another cooperative project, was produced by the Region 8 staff of the U. S. Forest Service and made available for purchase by the individual states.

The Jelly Elliott series of radio recordings, originally produced on a regional basis, proved so successful that the second series (for 1950-51) was produced for nationwide use as part of the National Cooperative Forest Fire Prevention Campaign.

## TRAINING

Every employee of the Forestry Commission is a public relations man every day of the year. He must be trained to do the public relations job, just as he must be trained to use a piece of fire fighting equipment.

Because the Forestry Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has paid untold benefits and has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective and all other phases of the public relations program have been improved through training.

During the district fire control training meetings, district and unit personnel were trained to make the most effective use of materials they have to work with. An example of this is the instruction given on using a specially prepared leaflet "By Our Own Hand" as a fire prevention tool. This leaflet was developed to be used in solving a particular problem of fire prevention, and it is felt that the training of field personnel in the use of this "tool" will make their fire prevention activities more effective.

Parks personnel who attended the short course in state park administration at Raleigh, N. C. received training in public rela-



tions to enable them to do a better job of serving state park visitors.

## PUBLICATIONS AND POSTERS

Requests for information on forestry and state parks are received daily from individuals, organizations and agencies. Up-to-date printed materials often serve to answer these requests.

Printed materials are also distributed at schools, county fairs, etc., to explain various forestry and state park activities.

The public relations branch each year prepares publications such as leaflets, booklets and folders. During the year a number of new publications were prepared.

"Southern Pine Bark Beetles" is an 8-page illustrated booklet describing how to recognize, prevent and control insect damage caused by certain forest tree insects. Engravings for this publication was furnished through the courtesy of the Texas Forest Service.



A number of new publications were prepared and distributed during the year.

"South Carolina's Forests" is a 32-page illustrated booklet which summarizes the results of the forest reappraisal survey made in South Carolina. It points out trends in growth, drain, forest area and composition and other forest conditions.

"The World is so Full of a Number of Things" is an 18-page teachers' manual prepared for use with the series of radio programs of the same name.

"Cash Crops From South Carolina Woodlands" is a 32-page illustrated booklet issued in connection with the "More Trees for South Carolina" project launched during the year. It describes the importance of South Carolina's forest resources and points out that sound forestry principles must be applied in order to have maximum production and profit from the state's woodlands.

"Filmstrip Manual—Cash Crops from South Carolina Woodlands" is a 16-page illustrated manual prepared for use with the "Cash Crops" filmstrip.

Two issues of "Forestry and Park Notes", a 4-page illustrated periodical, were prepared during the year.

"Plant Your Trees Right", an illustrated folder on reforestation, was reprinted during the year.

"Annual Report of the State Commission of Forestry 1949-50" is a 116-page report issued during the year summarizing the accomplishments of the Commission during the year.

A new State Park poster and a Burning Permit poster were prepared.

Some 650,000 copies of a fire-prevention message were placed between the new 1951 South Carolina automobile license plates, through the cooperation of the State Highway Department.

The State School Book Commission again cooperated with the Forestry Commission in the preparation and distribution of 1,000,000 textbook covers with forestry and state park messages, for use by South Carolina school children.

At the end of the year the North Carolina Division of Forestry asked for and received permission to use the S. C. forestry bookcover message for North Carolina bookcovers, and also to copy two South Carolina publications, "By Our Own Hand" and "99 Out of 100".



The following summary does not include CFFP Campaign materials which are reported elsewhere:

#### Distribution of Literature

Posters .....	7,550
Bulletins and Leaflets .....	139,636
License Plate Inserts .....	650,000
Bookcovers .....	1,000,000
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TOTAL .....	1,797,186

#### NEWS RELEASES AND ARTICLES

Newspapers and magazines accepted and used material prepared by personnel of the Commission more readily than ever before. This is largely due to better quality of work being handed the editors. The material is also more acceptable to the readers because it is more readable and more interesting. This improvement is due primarily to public relations training.

During the year Commission personnel prepared 955 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during the critical fire situation, news items would be given orally to individual reporters and to the wire services.

In addition to news releases, several feature articles on various phases of parks and forestry were prepared. Pictures or prepared mats illustrating the story were always sent with the feature. More forestry and park pictures were printed in newspapers, magazines and other publications this year than ever before.

Forestry Commission personnel in every county of the state prepare news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors.

The excellent press coverage has helped place forestry and park news before the people more prominently than ever before. A total of 3,633 separate news releases on forestry and state parks were published in the newspapers of the state during the year.



## BOYS FORESTRY CAMP

The fourth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 14-19. Seventy-one young men representing every county in the state attended the week long camp. Two boys from each county attended in most cases. One boy was the FFA student in each county with the best home forestry project. The other was the boy chosen on the basis of writing the best letter to his county ranger on the subject "Why I Would Like to Attend Boys' Forestry Camp".

During the week the boys learned about fire control, forest management, reforestation and state parks. A healthful and well-rounded athletic and recreational program was also provided. The boys had "the time of their lives" and learned forestry at the same time.



Seventy-one boys learned many practical forestry lessons at the fourth annual Boys Forestry Camp held at Cheraw State Park.

## SIGN AND WOODWORKING SHOP

Personnel of the sign and woodworking shop continued to construct routed letter signs, picnic chairs and tables, build fair exhibits and do necessary cabinet and carpentry work. This work benefitted forestry greatly during the year. The distinctive routed letter signs easily identified the various installations



with the Commission of Forestry and made them easier to use. The Commission's fair exhibits helped to bring forestry and state park information to many people during the year.

### **SOUTH CAROLINA TREE FARMS SYSTEM**

The South Carolina Tree Farms System was set up to recognize the many deserving landowners who practice good forestry. To become a tree farmer a landowner must prevent woods fires and take all reasonable precautions against them. In addition, he must apply sound cutting practices to existing timber and must plant areas that will not reseed naturally. After a tree farmer is certified, his property is marked with a Tree Farm sign. His neighbor and people passing by may see good forestry practices and come to understand forest values. Tree farms are also effective places to hold demonstrations on all phases of forestry.

The Tree Farm movement is sponsored in South Carolina by the State Commission of Forestry and the Clemson College Extension Service.

Before a landowner can be certified as a Tree Farmer, his application must pass the County Tree Farm Committee which is made up of the District Forester, County Agent, and a member appointed by the County Forestry Board. After clearing this committee, the application goes to the State Committee which takes final action. This committee is made up of prominent citizens of the state interested in the advancement of forestry. They are: James H. Graham, Charleston; C. P. Key, Lodge; Oswald Lightsey, Miley; Director D. W. Watkins, Clemson; S. B. Huff, Piedmont; and C. H. Flory, Columbia. Assistant State Forester John C. Witherspoon is Secretary of the State Committee.

There are now 69 Tree Farms in the state comprising 1,012,963 acres.

Landowners who have qualified under the South Carolina Tree Farm System this year are as follows:

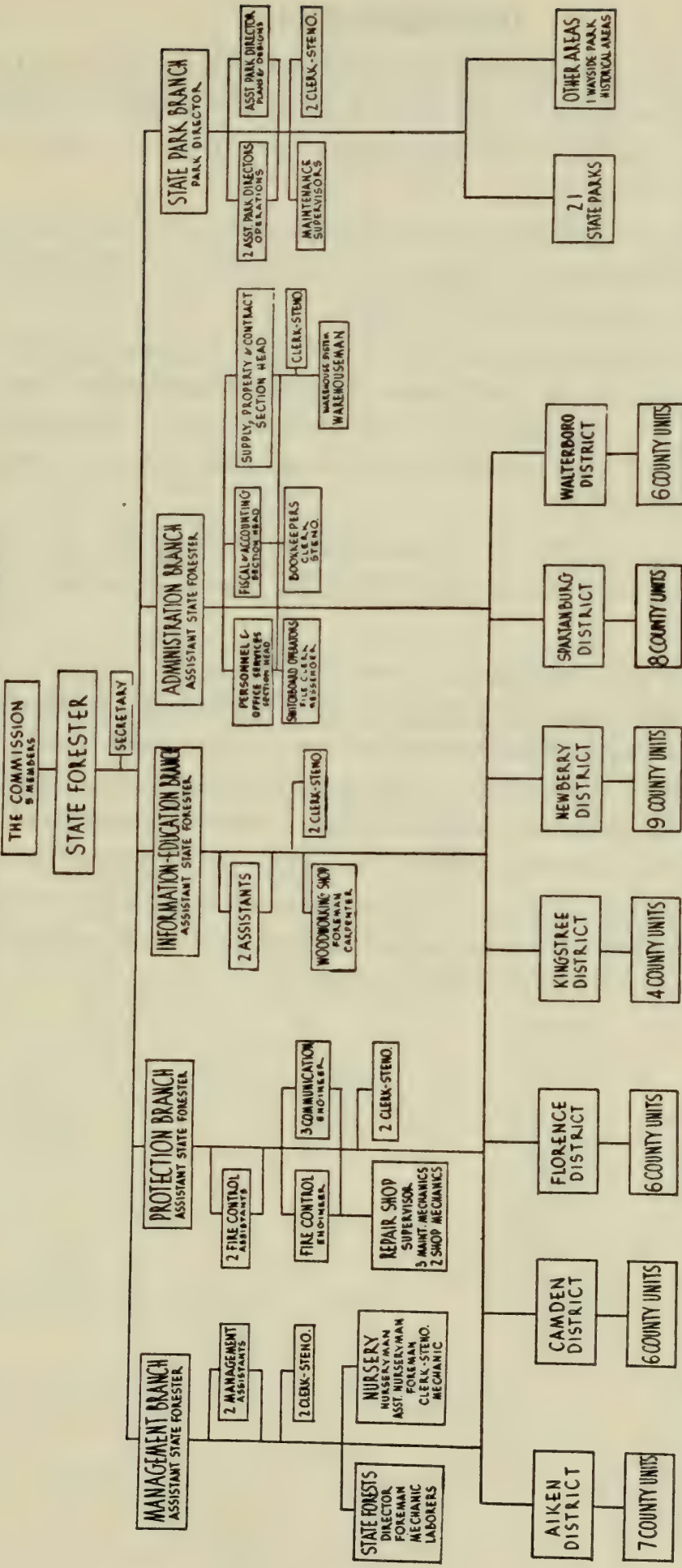
Name	County	Acreage
A. W. Murray .....	Chester-Newberry-Saluda and Union .....	4,684
Sou. Kraft Div. International Paper Co. ....	Charleston .....	8,046
E. F. Conger .....	Aiken .....	14,500
West Va. Pulp & Paper Co., (Westvaco) .....	Georgetown .....	20,398
West Va. Pulp & Paper Co. ....	Orangeburg, Charleston, Colleton, Dorchester, Jasper, Berkeley, Georgetown, Horry and Williamsburg .....	320,057
Ferdinand Gregorie .....	Charleston .....	525
F. W. Atkinson .....	Aiken .....	155
Duke Power Company .....	Kershaw, Lancaster, Chester, Fairfield and York..	61,500
R. C. Kinard .....	Colleton .....	1,155
Homer Saunders .....	Colleton .....	3,500
E. Heyward Benton .....	Colleton .....	75
E. D. Kinard .....	Colleton .....	268
M. W. Wise .....	Barnwell .....	187
W. P. Boylston and Family .....	Barnwell .....	860
Graniteville Company .....	Aiken .....	15,550
H. N. Slater .....	Jasper .....	4,322
O. L. Warr .....	Darlington .....	200
E. V. Golding .....	Laurens .....	135
J. T. Squires .....	Dillon .....	285
D. H. Sullivan .....	Laurens .....	149
International Paper Co. (Sou. Kraft Div.) .....	Horry .....	66,724
Gair Woodlands Corp. ....	Abbeville, Allendale, Berkeley, Charleston, Chester, Colleton, Dorchester, Edgefield, Fairfield, Greenwood, Hampton, Jasper, Laurens, Newberry, Saluda, Spartanburg, Union .....	53,832
TOTAL .....		577,107

During the calendar year 1950 South Carolina achieved national recognition by adding more tree farm acreage than any other state in the nation.



# SOUTH CAROLINA STATE COMMISSION OF FORESTRY

## ORGANIZATION CHART



DISTRICT OFFICE ORGANIZATION  
 DISTRICT FORESTER  
 2 ASSISTANT FORESTERS  
 DISTRICT RANGER  
 CLERK - STENOGRAPHER

COUNTY UNIT ORGANIZATION  
 RANGER  
 DISPATCHER  
 WARDENS  
 TRACTOR OPERATORS  
 TOWERMEN  
 FLEXIBLE CREWS  
 VOLUNTEER CREWS

STATE PARK ORGANIZATION  
 SUPERINTENDENT  
 FOREMAN  
 LABORERS  
 SEASONAL  
 LIFE GUARDS  
 BATH HOUSE OPERATOR  
 CONCESSIONAIRE

## ADMINISTRATION

The purpose and function of the Commission's Administrative Branch is to coordinate the activities of both field and central office on fiscal and accounting, supply and property and personnel and office services.

A simplified accounting system was prepared for use by all Park Superintendents in order that an accurate record of concession stand receipts could be kept.

During the fiscal year an inventory and summary of all real property and improvements owned by the Commission was completed. On the basis of this inventory, the Commission has 124,308 acres of land under deed or lease and property estimated at \$6,095,228.00.

Personnel placed 1,157 requisitions for supplies and equipment necessitating the issuing of 2,283 purchase orders during the year.

As a result of low salaries, some twenty-eight per cent (28%) of the total personnel employed by the Commission resigned during the fiscal year. The largest per cent of the total were County Unit personnel; however, in one group of technical employees, foresters who assist landowners with timber management problems, there was a seventy-three per cent (73%) turn-over.

The Efficiency Rating System applicable to all Commission personnel, which had been initiated during the fiscal year 1949-50, was further revised and improved.



**APPENDIX**  
**FINANCIAL STATEMENT**  
**SOUTH CAROLINA STATE COMMISSION OF FORESTRY**  
**July 1, 1950 - June 30, 1951**

**RECEIPTS**

Division of Forestry:

Balance from 1949-50—Trust Fund .....	\$ 8,148.25	
State Appropriation—Operating .....	635,500.00	
Federal Funds—Protection CM Law		
Sec. 2 .....	320,191.00	
Federal Funds—Reforestation CM Law		
Sec. 4 & N-D .....	10,666.00	
Federal Funds—Farm Forestry .....	15,137.63	
Nursery .....	34,223.24	
State Forests .....	25,368.09	
Harbison Forest—Purchase A/C .....	11,791.77	
Marking and Tallying Timber .....	7,926.31	
Counties & Timber Firms .....	5,180.00	
More Trees Program—American Legion	2,568.50	
Miscellaneous .....	474.44	
Petty Cash from General Fund—Rev-		
enue .....	62.88	
Radio Communication Project .....	18,509.71	
		<hr/>
Total Receipts—Forestry .....		\$ 1,095,747.82
Less Receipts Deposited to Cr. State Revenue Ac-		
count .....		68,921.35
		<hr/>
Total Receipts available for Expenditures .....		1,026,826.47
Total Expenditures .....		1,025,264.50
		<hr/>
Balance—Division of Forestry .....		\$ 1,561.97*

Division of State Parks:

Balance from 1949-50 (Deposits—Hunt-		
ing Island) .....	\$ 5,766.34	
Balance from 1949-50 (M. B. Fishing		
Pier) .....	405.04	
State Appropriation—Operating .....	250,000.00	
Greenville County—Park for Colored ...	6,000.00	
Forests & Parks Fund—Hunting Island		
Deposits .....	2,830.00	
Myrtle Beach Fishing Pier .....	27,504.14	
Cabin Rentals .....	19,444.40	
Concession Stands .....	4,813.25	
Bathhouse Receipts .....	29,630.79	
Boat Rentals .....	3,716.15	
Group Camps .....	8,236.56	
Picnic Shelters & Recreational Bldgs. ....	1,943.81	
Miscellaneous Receipts .....	867.26	
		<hr/>
Total Receipts—Parks .....		361,157.74
Less Receipts Deposited to Cr. State Revenue		
Account .....		68,652.22
		<hr/>
Total Receipts Available for Expenditure .....		292,505.52
Total Expenditures .....		290,535.97
		<hr/>
Balance—Division of State Parks .....		\$ 1,969.55**

## EXPENDITURES

Administrative and Technical .....	\$ 235,493.28	
State Forest Nursery .....	54,936.57	
State Forest Projects .....	48,735.06	
County Forest Project .....	7,294.98	
Fire Protection .....	651,348.90	
Farm Forestry Projects .....	27,392.83	
Refunds—Petty Cash .....	62.88	
Total Division of Forestry .....		\$ 1,025,264.50
Total Division of State Parks .....		290,535.97
Grand Total—Expenditures .....		\$ 1,315,800.47

## RECAPITULATION

## Funds Available:

Division of Forestry .....	\$ 1,026,826.47	
Division of State Parks .....	292,505.52	
		\$ 1,319,331.99

## Expenditures:

Division of Forestry .....	\$ 1,025,264.50	
Division of State Parks .....	290,535.97	
		\$ 1,315,800.47
Balance .....		\$ 3,531.52*-**
* Forestry: Federal Fund .....	\$ 4.28	
More Trees Program ..	1,421.97	
Radio Com. Fund .....	135.72	
** Parks: Appropriated Fund .....	87.80	
M. B. Fishing Pier ....	13.54	
Hunting Is. Deposits ..	1,868.21	
	\$3,531.52	



TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1950-51

UNIT	Organized Personnel							Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Members, Retainer Crews	Members, Flexible Crews	Total	Volunteer, FFSS Crews	Other Volunteers	
Abbeville .....	1	2	..	1	..	2	7	30	146	183
Aiken .....	1	5	2	5	..	9	22	32	..	54
Allendale .....	1	2	1	3	..	4	11	106	..	117
Anderson .....	1	2	..	3	..	5	11	101	..	112
Bamberg .....	1	2	1	2	..	4	10	66	..	76
Barnwell .....	1	2	1	3	..	4	11	90	..	101
Beaufort .....	2	2	1	3	..	6	14	4	117	135
Berkeley .....	1	4	1	4	..	3	13	29	504	546
Calhoun .....	1	2	1	2	..	6	12	11	..	23
Charleston .....	1	4	1	2	..	5	13	9	599	621
Cherokee .....	1	1	..	1	..	3	6	176	..	182
Chester .....	1	3	..	1	..	9	14	8	700	722
Chesterfield .....	1	3	1	4	..	3	12	45	622	679
Clarendon .....	1	3	1	3	..	3	11	95	273	379
Colleton .....	1	4	2	5	..	5	17	17	453	487
Darlington .....	1	2	1	3	..	4	11	32	..	43
Dillon .....	1	2	1	2	..	2	8	20	..	28
Dorchester .....	1	3	1	3	..	..	8	6	96	110
Edgefield .....	1	2	..	1	..	1	5	21	278	304
Fairfield .....	1	4	..	3	37	..	45	14	556	615
Florence .....	1	4	1	4	..	2	12	36	..	48
Georgetown .....	1	4	2	4	3	5	19	25	758	802
Greenville .....	1	3	..	4	..	6	14	85	..	99
Greenwood .....	1	2	..	2	..	4	9	7	363	379
Hampton .....	1	3	1	3	..	2	10	10	136	156
Horry .....	1	5	2	4	..	4	16	60	..	76
Jasper .....	1	3	1	2	..	..	7	2	397	406
Kershaw .....	1	3	2	6	..	6	18	46	949	1,013
Lancaster .....	1	3	1	2	..	..	7	34	488	529
Laurens .....	1	3	..	2	..	3	9	10	300	319
Lee .....	1	2	1	3	..	3	10	30	444	484
Lexington .....	1	3	2	5	..	6	17	64	..	81
Marion .....	1	3	1	3	..	1	9	37	..	46
Marlboro .....	1	3	1	3	..	2	10	31	..	41
McCormick .....	1	1	..	..	..	..	2	18	166	186
Newberry .....	1	2	..	2	..	4	9	8	404	421
Oconee .....	1	2	..	3	..	6	12	132	..	144
Orangeburg .....	1	5	2	5	..	8	21	102	..	123
Pickens .....	1	3	..	4	..	6	14	85	..	99
Richland .....	1	5	1	4	..	3	14	42	363	419
Saluda .....	1	2	..	1	..	2	6	10	131	147
Spartanburg .....	1	3	..	4	..	6	14	22	..	36
Sumter .....	1	3	1	3	..	4	12	45	467	524
Union .....	1	2	..	1	..	7	11	212	..	223
Williamsburg .....	1	5	2	4	..	..	12	82	500	594
York .....	1	2	..	4	..	18	25	180	..	205
TOTALS .....	47	133	37	136	40	187	580	2,327	10,210	13,117

TABLE 2—EDUCATIONAL WORK—PROTECTIVE ORGANIZATIONS—FISCAL YEAR 1950-51

UNIT	Rangers and Wardens										Tower-men
	Visits to Sawmills	Brush Burning Inspections	Notices Posted	Literature Distributed	People Interviewed	Talks at Schools	Forestry Picture Shows	News Releases	Fire Law Prosecutions	Fire Law Convictions	
Abbeville	23	2	1,381	6,192	1,293	15	3	4	7	7	104
Aiken	19	6	74	2,250	193	10	16	2	1	1	592
Allendale	23	124	138	2,250	980	23	8	41	8	8	123
Anderson	12	5	570	13,024	200	20	...	25	1	1	1,016
Bamberg	25	4	106	2,250	341	15	13	10	1	1	112
Barnwell	74	106	140	2,250	985	4	4	2	4	4	2,370
Beaufort	12	21	86	2,500	80	14	2	18	...	...	173
Berkeley	45	57	826	15,694	155	5	...	5	7	6	164
Calhoun	7	10	75	2,250	86	112	15	4	2	1	50
Charleston	16	137	147	3,500	1,009	27	1	23	2	2	538
Cherokee	10	1	316	13,956	113	...	...	31	6	6	17
Chester	2	52	...	1,314	1,089	47	6	9	15	15	2,393
Chesterfield	80	47	748	4,728	95	1	8	25	18	17	847
Clarendon	23	29	350	5,046	1,156	9	...	3	13	13	420
Colleton	58	261	183	2,700	1,031	35	18	20	4	4	753
Darlington	20	3	21	1,313	1,679	25	14	14	13	13	165
Dillon	2	49	238	4,623	632	7	18	10	12	12	170
Dorchester	81	70	26	2,600	674	4	2	8	...	...	212
Edgefield	9	1	326	2,825	463	40	6	5	8	8	38
Fairfield	28	8	27	1,106	600	15	6	16	11	11	132
Florence	27	54	151	5,230	1,708	14	29	4	35	33	324
Georgetown	47	24	1,640	12,411	852	24	4	14	2	2	46
Greenville	21	307	794	16,525	2,119	...	1	48	18	17	1,727
Greenwood	12	10	401	4,697	239	17	10	21	6	6	567
Hampton	25	8	769	2,550	181	13	8	26	6	6	1,021
Horry	25	8	270	2,457	4,199	...	28	11	30	29	295
Jasper	14	30	84	2,200	391	14	...	6	...	...	217
Kershaw	31	19	347	7,649	679	1	8	3	19	18	2,222
Lancaster	6	56	387	1,326	2,657	15	2	1	20	20	1,350
Laurens	15	40	138	2,186	652	2	4	3	3	3	425
Lee	20	91	342	5,392	1,445	1	15	13	21	21	790



Lexington	3	14	94	2,250	1,103	2	9	17	14	14	434
Marion	12	19	50	1,926	438	11	11	50	10	9	117
Marlboro	16	11	20	1,341	1,311	23	16	22	10	9	261
McCormick	2	24	1,163	4,876	127	4	8	9	3	3	...
Newberry	12	3	68	2,416	725	42	5	17	9	8	432
Oconee	18	21	228	11,589	2,972	20	7	5	11	10	983
Orangeburg	5	13	194	2,250	219	5	10	2	11	11	51
Pickens	21	15	77	8,776	1,802	12	8	15	11	11	774
Richland	81	18	577	3,206	1,340	26	2	2	8	8	4,246
Saluda	21	16	89	1,282	2,626	32	4	3	2	2	9
Spartanburg	16	23	268	15,603	1,312	...	...	30	1	1	2,042
Sumter	42	115	247	3,119	601	46	19	51	3	3	1,076
Union	43	18	1,392	21,881	1,533	10	12	54	...	...	32
Williamsburg	12	8	650	6,436	535	10	8	2	2	1	954
York	22	33	484	18,244	2,520	12	5	26	10	10	1,081
TOTALS	1,138	1,991	16,702	260,169	47,140	784	373	730	398	385	31,865

TABLE 3—SUMMARY OF FIRES BY MONTHS—JULY 1, 1950-JUNE 30, 1951

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	31	0.5	231.7	7.5
August .....	62	0.9	387.6	6.3
September .....	23	0.3	134.8	5.9
October .....	84	1.3	426.5	5.1
November .....	247	3.7	2,181.3	8.8
December .....	560	8.4	7,727.5	13.8
January .....	1,021	15.4	17,999.1	17.6
February .....	1,841	27.7	52,288.3	28.4
March .....	1,283	19.3	30,498.1	23.8
April .....	669	10.1	22,162.1	33.1
May .....	640	9.6	11,771.2	18.4
June .....	182	2.8	2,032.1	11.2
TOTALS .....	6,643	100.0	147,840.3	22.3



UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Unknown		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area		
Abbeville	...	...	...	...	1	9.1	10	164.1	15	132.8	...	...	...	...	1	6.0	2	32.4	29	344.4
Aiken	...	16.0	...	55.2	13	190.5	86	900.3	43	687.4	...	4,601.8	...	103.4	33	433.3	...	...	233	6,987.9
Allendale	...	...	9	87.2	4	197.0	44	216.6	46	422.2	23	389.0	3	6.9	8	27.9	3	44.6	140	1,391.4
Anderson	...	...	...	...	3	102.8	36	236.5	44	252.2	8	182.6	1	0.5	11	54.6	1	0.3	104	829.5
Bamberg	...	...	...	25.0	1	9.0	24	94.7	59	635.5	27	404.5	3	11.5	6	40.5	17	349.5	138	1,570.2
Barnwell	...	...	7	73.0	1	7.0	134	1,575.0	17	116.0	1	1.0	5	92.0	1	0.1	...	...	166	1,864.1
Beaufort	...	...	1	3.0	12	51.3	4	33.0	15	132.9	42	566.3	2	63.5	3	14.0	13	73.0	92	937.0
Berkeley	...	...	2	12.1	2	38.2	18	184.0	5	57.6	270	4,148.0	4	10.1	18	102.7	1	0.1	320	4,552.8
Calhoun	...	1.4	3	25.1	1	15.0	49	474.2	3	33.8	19	290.2	...	...	4	25.2	1	1.4	83	866.3
Charleston	...	...	9	31.9	9	138.8	19	518.6	32	505.8	110	2,259.1	...	...	8	88.5	...	...	182	3,515.2
Cherokee	...	1.0	5	132.6	2	11.0	27	267.7	9	62.5	27	128.4	6	60.0	1	1.0	...	...	79	691.7
Chester	...	...	10	57.5	...	...	34	216.2	22	173.9	12	35.4	...	...	18	164.5	2	80.0	99	729.7
Chesterfield	...	23.5	6	365.0	...	...	23	874.3	26	2,702.6	52	4,582.2	3	34.0	19	3,869.0	2	75.0	135	12,491.6
Clarendon	...	...	...	...	3	82.0	12	223.8	12	132.5	152	4,611.0	1	60.0	6	42.5	1	45.0	187	5,196.8
Colleton	...	15.0	2	21.2	4	11.2	38	176.3	55	515.8	66	803.0	5	81.1	6	19.5	7	90.0	186	1,733.1
Darlington	...	6.9	1	84.0	16	370.7	68	690.9	55	507.8	17	325.4	2	80.5	8	195.2	7	197.4	177	2,458.8
Dillon	...	...	3	5.5	4	3.1	8	62.2	56	587.6	65	1,474.8	4	492.0	3	0.6	...	...	143	2,625.8
Dorchester	...	...	1	1.0	2	245.0	9	399.0	18	1,477.0	16	448.5	2	5.0	3	112.0	14	182.5	65	2,870.0
Edgefield	...	5.0	2	6.8	1	1.2	17	113.1	23	189.2	4	63.8	...	...	1	4.4	2	18.0	51	401.5
Fairfield	...	1.5	5	23.1	4	362.0	54	849.8	11	107.0	3	70.0	7	38.3	7	13.7	2	45.0	94	1,510.4
Florence	...	0.1	7	...	7	134.5	91	2,543.3	88	2,533.2	141	5,446.6	1	0.5	15	214.4	...	...	345	10,873.8
Georgetown	...	22.0	1	...	1	1.0	8	182.6	17	1,154.6	130	1,147.0	2	10.0	10	18.9	...	...	169	2,536.1
Greenville	...	0.2	1	6.0	6	51.1	109	372.2	26	42.2	27	342.7	...	...	37	86.1	...	...	207	900.5
Greenwood	...	20.0	9	100.2	2	11.2	28	735.3	24	120.2	...	...	2	4.0	7	19.7	3	26.5	76	1,037.1
Hampton	...	8.0	...	...	3	2.5	4	7.5	3	42.0	24	235.3	...	...	2	5.0	1	7.0	38	307.3
Horry	...	7.6	...	...	8	195.2	90	2,848.4	63	2,464.5	69	5,214.5	...	...	70	5,375.5	20	616.5	329	16,957.6
Jasper	...	41.0	...	...	1	2.0	5	11.0	12	178.0	96	1,415.2	8	0.3	5	133.9	...	...	121	1,781.4
Kershaw	...	68.5	13	159.3	5	190.0	51	962.5	40	1,752.5	20	1,698.7	2	390.0	9	1,531.5	...	...	156	6,889.2
Lancaster	...	...	1	4.0	...	...	37	354.3	20	156.0	17	617.7	1	2.0	10	26.4	1	8.0	87	1,168.4
Laurens	...	...	4	221.0	10	392.8	45	374.8	28	220.1	2	15.0	...	...	5	80.6	10	156.8	104	1,461.1
Lee	...	...	...	...	...	...	36	912.1	13	1,226.5	8	120.1	...	...	22	1,008.0	...	...	79	3,266.7
Lexington	...	8.0	3	39.0	10	123.1	41	403.1	42	338.7	7	141.0	4	42.0	...	7.5	...	...	112	1,102.4
Marion	...	15.0	2	16.3	5	27.0	60	1,136.8	23	447.8	59	1,101.8	...	...	...	...	...	2.7	151	2,747.4
McCormick	...	...	...	...	1	7.0	23	170.7	39	1,398.6	215	7,997.9	...	...	...	...	...	7.3	302	10,040.4
Marlboro	...	...	4	29.2	...	...	14	181.1	5	33.2	...	...	...	...	...	...	...	95.5	35	390.0
Newberry	...	4.8	5	62.6	1	15.0	15	115.0	6	59.0	1	2.0	...	2.5	3	48.5	8	83.0	45	433.1
Orangeburg	...	...	...	...	...	...	21	76.4	34	288.8	9	23.9	1	0.4	13	44.3	...	...	80	438.6
Pickens	...	1.4	4	22.8	15	285.6	31	268.1	23	625.8	521	14,826.6	7	121.5	6	105.8	...	...	608	16,257.6
Richland	...	...	...	...	2	5.1	10	38.1	31	167.1	7	243.3	1	2.0	19	25.6	5	27.7	75	508.9
Saluda	...	...	7	75.2	6	20.2	53	1,576.0	26	799.1	62	1,220.6	1	7.5	9	70.6	1	40.0	165	3,809.2
Spartanburg	...	0.3	1	13.3	...	...	4	8.1	13	191.7	1	47.1	...	...	4	36.8	3	30.5	27	327.8
Sumter	...	...	10	98.5	...	...	41	417.2	13	111.5	13	2,023.0	...	...	15	121.8	...	...	96	2,794.0
Union	...	0.1	1	5.0	3	21.0	51	587.1	13	215.7	51	1,154.8	1	50.0	11	84.0	16	399.0	148	2,516.7
Williamsburg	...	4.0	8	95.9	1	1.5	14	121.1	12	70.7	7	83.8	...	...	7	18.5	...	...	50	395.5
York	...	...	2	2.6	5	104.1	15	90.9	49	832.8	91	2,493.5	...	...	3	42.5	...	...	166	3,571.8
York	...	...	5	57.2	...	...	77	967.0	42	422.5	15	121.1	3	132.0	6	37.7	1	22.0	149	1,759.5
TOTALS	40	271.3	150	2,018.5	180	3,476.8	1,688	23,731.0	1,271	25,326.9	2,568	73,064.2	98	2,169.5	490	14,889.2	158	2,892.9	6,643	147,840.3

TABLE 5—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1950-51

UNIT	Class A		Class B		Class C		Class D		Class E		Total Number	Percent of Total Number
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Abbeville	...	...	20	0.5	9	0.4	...	...	...	...	29	0.4
Aiken	12	2.6	181	4.6	50	2.5	8	4.3	2	6.9	253	3.8
Allendale	1	0.2	113	2.9	23	1.1	3	1.6	...	...	140	2.1
Anderson	3	0.6	81	2.1	20	1.0	...	...	...	...	104	1.6
Bamberg	2	0.4	98	2.5	35	1.7	3	1.6	...	...	138	2.1
Barnwell	2	0.4	102	2.6	62	3.0	...	...	...	...	166	2.5
Beaufort	19	4.1	49	1.2	23	1.1	1	0.5	...	...	92	1.4
Berkeley	19	4.1	201	5.1	96	4.7	4	2.1	...	...	320	4.8
Calhoun	4	0.9	54	1.4	25	1.2	...	...	...	...	83	1.2
Charleston	9	1.9	101	2.6	68	3.3	4	2.1	...	...	182	2.7
Cherokee	9	1.9	53	1.3	16	0.8	1	0.5	...	...	79	1.2
Chester	6	1.3	75	1.9	18	0.9	...	...	...	...	99	1.5
Chesterfield	7	1.5	56	1.4	52	2.6	...	...	...	...	135	2.0
Clarendon	9	1.9	106	2.7	63	3.1	8	4.3	6	20.7	187	2.8
Colleton	27	5.8	113	2.9	45	2.2	1	0.5	1	3.4	186	2.8
Darlington	23	5.0	100	2.5	51	2.5	3	1.6	...	...	177	2.7
Dillon	11	2.4	91	2.3	38	1.9	3	1.6	...	...	143	2.1
Dorchester	1	0.2	35	0.9	25	1.3	1	0.5	...	...	65	1.0
Edgefield	3	0.6	40	1.0	8	0.4	...	...	3	10.4	51	0.8
Fairfield	...	...	70	1.8	22	1.1	...	...	...	...	94	1.4
Florence	23	5.0	134	3.4	166	8.2	2	1.1	...	...	345	5.2
Georgetown	31	6.6	98	2.5	38	1.9	22	11.7	...	...	169	2.5
Greenville	47	10.1	148	3.8	11	0.5	1	0.5	1	3.4	207	3.1
Greenwood	3	0.6	61	1.5	11	0.5	...	...	...	...	76	1.1
Hampton	9	1.9	22	0.6	7	0.3	...	...	1	...	38	0.6
Horry	29	6.2	124	3.2	150	7.4	...	...	...	...	329	5.0
Jasper	16	3.4	59	1.5	45	2.2	22	11.7	4	13.9	121	1.8
Kershaw	3	0.6	97	2.5	46	2.3	1	0.5	...	...	156	2.4
Lancaster	6	1.3	61	1.5	19	0.9	6	3.2	4	13.9	87	1.3
Laurens	...	...	85	2.2	17	0.8	1	0.5	...	...	104	1.6
Lee	3	0.6	28	0.7	42	2.1	2	1.1	...	...	79	1.2
Lexington	6	1.3	83	2.1	22	1.1	1	0.5	1	3.4	112	1.7



Marion	14	3.0	87	2.2	45	2.2	5	2.7	...	...	151	2.3
Marlboro	37	7.9	141	3.6	97	4.8	25	13.3	2	6.9	302	4.6
McCormick	1	0.2	26	0.7	8	0.4	...	...	...	...	35	0.5
Newberry	...	...	33	0.8	12	0.6	...	...	...	...	45	0.7
Oconee	13	2.8	61	1.5	6	0.3	...	...	...	...	80	1.2
Orangeburg	2	0.4	285	7.3	300	14.8	19	10.1	2	6.9	608	9.2
Pickens	7	1.5	61	1.5	6	0.3	1	0.5	...	...	75	1.1
Richland	5	1.1	113	2.9	41	2.0	5	2.7	1	3.4	165	2.5
Saluda	...	...	18	0.5	9	0.4	...	...	...	...	27	0.4
Spartanburg	5	1.1	66	1.7	22	1.1	2	1.1	1	3.4	96	1.4
Sumter	7	1.5	81	2.1	59	2.9	1	0.5	...	...	148	2.2
Union	1	0.2	38	1.0	11	0.5	...	...	...	...	50	0.8
Williamsburg	25	5.4	77	2.0	57	2.8	7	3.7	...	...	166	2.5
York	7	1.5	99	2.5	38	1.9	5	2.7	...	...	149	2.2
TOTALS	467	100.0	3,925	100.0	2,034	100.0	188	100.0	29	100.0	6,643	100.0

TABLE 6—SUMMARY OF FIRES BY COUNTIES AND MONTHS—FISCAL YEAR 1950-51

UNIT	July 1950		Aug. 1950		Sept. 1950		Oct. 1950		Nov. 1950		Dec. 1950		Jan. 1951		Feb. 1951		Mar. 1951		April 1951		May 1951		June 1951		
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	
Abbeville	1	4.0	..	..	..	7.3	..	..	..	..	3	12.8	1	9.0	6	71.6	8	139.8	5	40.0	5	67.2	..	..	
Aiken	3	8.8	9	19.6	4	..	5	7.4	13	51.6	23	128.4	29	198.2	46	473.6	39	1,466.6	31	3,212.0	43	1,251.2	8	163.2	
Allendale	..	..	..	..	1	0.9	..	..	2	0.7	11	25.7	30	338.4	42	594.3	34	312.7	9	64.3	9	50.0	2	4.4	
Anderson	1	0.5	1	0.4	1	0.6	..	1	1.8	2	13.2	13	50.0	6	25.0	14	77.1	27	267.4	19	229.0	16	145.5	3	19.0
Bamberg	..	..	..	..	..	..	2	2.5	7	19.5	9	81.0	40	300.5	56	782.7	22	378.0	1	3.0	1	3.0	..	..	
Barnwell	..	..	..	..	1	1.0	3	9.1	7	89.0	12	116.0	46	406.3	44	519.7	21	272.0	16	249.0	14	152.0	2	50.0	
Beaufort	..	..	..	..	..	..	1	4.5	3	26.0	8	70.2	24	243.1	22	271.6	16	93.5	8	119.6	10	108.5	..	..	
Berkeley	..	..	..	..	1	77.0	..	..	4	21.8	21	278.3	52	1,167.6	116	1,391.0	77	957.3	33	512.9	10	57.4	6	89.5	
Calhoun	..	..	2	12.8	..	..	..	..	3	14.4	1	11.0	15	186.3	18	235.1	18	213.6	7	29.4	14	143.1	5	20.6	
Charleston	2	21.2	2	5.2	..	..	..	..	10	48.4	15	169.0	31	445.1	52	1,446.5	38	729.3	16	149.5	13	483.0	3	18.0	
Cherokee	..	..	..	..	..	..	3	11.7	7	15.1	29	125.9	3	23.0	8	64.5	15	256.5	8	70.0	2	103.0	4	22.0	
Chester	2	1.5	1	3.0	..	..	8	46.2	4	9.1	12	47.5	9	35.5	18	52.3	14	229.2	10	109.4	13	59.0	8	137.0	
Chesterfield	..	..	2	5.2	..	..	..	..	2	110.0	10	335.1	14	275.5	36	3,823.2	23	3,969.8	16	2,872.4	27	1,033.9	5	66.5	
Clarendon	..	..	..	..	..	..	1	6.0	1	4.0	18	176.7	38	759.0	88	3,672.3	28	502.5	6	21.0	6	50.3	1	5.0	
Colleton	1	0.1	2	8.0	..	..	3	5.8	4	9.1	17	52.6	17	108.5	57	510.9	48	726.5	18	154.1	12	133.7	7	22.8	
Darlington	..	..	1	0.2	1	0.3	5	25.3	15	171.0	17	408.7	33	171.6	42	702.1	25	251.9	9	297.2	18	369.2	11	61.3	
Dillon	..	..	1	0.1	1	10.0	..	..	4	13.2	13	103.7	24	202.4	41	1,155.0	31	273.4	11	287.0	15	568.0	2	13.0	
Dorchester	..	..	..	..	..	..	..	..	..	..	4	23.0	10	804.0	22	448.5	17	1,251.0	6	51.5	6	292.0	..	..	
Edgefield	1	0.4	1	0.8	..	..	2	0.7	1	4.0	2	44.6	8	83.3	8	71.3	9	40.4	8	45.5	10	105.5	1	5.0	
Fairfield	1	1.5	2	4.0	2	7.5	3	25.1	3	15.0	11	120.7	4	16.0	16	203.0	22	238.5	12	787.0	11	46.1	7	46.0	
Florence	1	40.0	2	49.1	2	11.1	5	27.2	10	74.5	37	1,287.6	77	2,905.7	117	4,364.4	45	1,448.7	23	368.6	17	131.8	9	165.1	
Georgetown	..	..	1	22.0	2	10.4	1	12.0	8	26.3	5	48.6	25	326.1	43	1,283.5	37	349.5	10	25.8	32	384.3	5	47.6	
Greenville	..	..	..	..	..	..	2	2.0	20	19.8	29	62.6	7	2.2	32	76.9	39	407.2	37	246.6	35	65.5	6	17.7	
Greenwood	..	..	4	38.2	..	..	1	1.0	8	36.2	11	647.1	5	15.0	10	24.1	15	89.6	10	121.2	10	60.9	2	3.8	
Hampton	1	8.0	6	3.4	..	..	..	..	..	..	3	5.0	3	10.7	9	75.0	8	200.5	3	1.3	5	3.4	..	..	
Horry	..	..	1	5.5	..	..	4	42.6	13	214.9	32	575.4	55	1,291.4	90	7,393.6	37	2,960.5	30	2,457.4	54	1,901.9	13	114.4	
Jasper	..	..	2	30.3	..	..	1	3.6	1	2.0	4	41.2	17	173.9	55	814.1	25	496.0	8	104.3	5	15.0	3	101.0	
Kershaw	..	..	4	32.0	..	..	5	92.0	9	31.1	13	40.7	8	75.4	35	1,514.3	38	1,694.7	24	3,125.5	12	220.5	8	63.0	
Lancaster	..	..	1	2.0	1	0.1	3	11.4	1	2.0	7	36.0	8	34.3	14	97.9	25	417.0	14	352.9	8	190.7	5	24.1	
Laurens	..	..	..	..	1	6.0	2	12.2	5	29.1	5	19.4	7	32.4	22	361.7	21	303.8	12	453.0	25	229.6	4	13.9	
Lee	..	..	..	..	..	..	..	..	2	23.0	3	33.5	12	101.0	35	2,032.0	18	868.0	5	142.2	1	20.0	3	47.0	
Lexington	..	..	4	14.2	1	0.2	2	5.0	7	13.1	6	8.0	17	324.0	24	262.0	23	237.9	13	84.3	13	153.7	..	..	
Marion	..	..	..	..	1	0.5	4	6.9	10	24.1	11	317.3	18	301.4	59	1,326.1	23	443.9	5	116.5	15	171.0	5	39.7	



Marlboro	..	....	1	8.1	1	0.2	2	4.5	16	546.1	22	810.4	86	1,090.3	96	4,777.9	36	935.2	27	1,081.8	10	743.8	5	42.1
McCormick	1	2.7	..	....	..	....	2	15.3	1	8.9	..	....	1	16.8	4	50.7	5	40.0	11	70.6	10	185.0	..	....
Newberry	..	....	..	....	2	....	2	12.6	2	1.5	4	60.0	5	78.0	11	71.0	6	36.0	6	60.0	7	109.0	2	5.0
Oconee	5	4.0	..	....	..	....	..	....	5	11.4	17	42.2	..	....	6	12.8	17	110.7	22	225.4	9	25.3	2	6.8
Orangeburg	..	90.2	4	49.5	..	....	..	....	10	216.2	34	561.8	141	4,433.3	222	7,312.2	120	2,745.1	31	351.4	37	373.1	4	124.8
Pickens	..	....	..	....	1	1.0	2	1.8	3	7.3	10	35.1	3	4.5	8	78.7	32	336.3	11	39.1	5	5.1	..	....
Richland	1	1.5	1	1.2	..	....	3	11.0	6	103.2	11	177.1	28	377.3	33	812.5	36	975.1	15	161.5	21	1,140.9	10	47.9
Saluda	..	....	..	....	..	....	..	....	1	6.0	3	38.8	2	26.9	3	53.7	8	84.7	4	97.0	4	19.8	2	0.9
Spartanburg	..	....	1	0.2	..	....	3	3.0	6	28.9	8	105.1	2	2.1	13	105.5	20	312.5	22	2,068.5	17	86.0	4	82.2
Sumter	..	....	1	50.0	..	....	1	3.0	4	27.7	13	122.2	24	282.5	47	913.8	42	724.9	9	145.5	1	2.0	6	245.1
Union	4	30.4	1	18.0	1	0.7	1	6.3	1	4.8	1	1.5	5	26.4	9	70.8	5	7.7	16	176.6	5	50.8	1	1.5
Williamsburg	1	0.1	..	....	1	....	1	7.0	4	77.7	7	210.1	15	200.1	65	1,370.5	38	1,319.4	21	272.4	10	50.1	4	64.4
York	3	16.8	4	4.6	..	....	..	....	2	10.4	15	59.9	16	68.1	27	466.3	32	333.3	31	508.9	15	210.4	4	30.8
TOTALS	31	231.7	62	387.6	23	134.8	84	426.5	247	2,181.3	560	7,727.5	1,021	17,999.1	1,841	52,288.3	1,283	30,498.1	669	22,162.1	640	11,771.2	182	2,032.1

TABLE 7—CLASSIFICATION BY CAUSES—FISCAL YEAR 1950-51

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	40	0.6	271.3	6.8
Railroads .....	150	2.3	2,018.5	13.5
Campers .....	180	2.7	3,476.8	19.3
Smokers .....	1,688	25.4	23,731.0	14.1
Debris Burning .....	1,271	19.1	25,326.9	19.9
Incendiary .....	2,568	38.6	73,064.2	28.4
Lumbering .....	98	1.5	2,169.5	22.1
Miscellaneous .....	490	7.4	14,889.2	30.4
Unknown .....	158	2.4	2,892.9	18.3
TOTALS .....	6,643	100.0	147,840.3	22.3

TABLE 8—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1946-47	1947-48	1948-49	1949-50	1950-51	Average for 5-year period
Lightning .....	0.2	1.2	0.4	0.2	0.6	0.4
Railroads .....	7.1	7.0	5.2	2.8	2.3	4.5
Campers .....	3.4	2.8	2.5	2.5	2.7	2.8
Smokers .....	27.7	31.2	27.3	19.9	25.4	25.3
Debris Burning .....	20.4	19.5	20.2	18.0	19.1	19.3
Incendiary .....	27.7	28.5	35.6	48.2	38.6	37.4
Lumbering .....	2.0	1.7	1.3	1.7	1.5	1.5
Miscellaneous .....	6.8	5.9	6.0	4.9	7.4	6.2
Unknown .....	4.7	2.2	1.5	1.8	2.4	2.6



TABLE 9—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1950-51

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	29	344.4	0.21	11.9
Aiken .....	450,200	253	6,987.9	1.55	27.6
Allendale .....	131,400	140	1,391.4	1.06	9.9
Anderson .....	173,700	104	829.5	0.48	8.0
Bamberg .....	126,000	138	1,570.2	1.25	11.4
Barnwell .....	147,800	166	1,864.1	1.26	11.2
Beaufort .....	188,400	92	937.0	0.50	10.2
Berkeley .....	398,974	320	4,552.8	1.14	14.2
Calhoun .....	123,500	83	866.3	0.70	10.4
Charleston .....	271,994	182	3,515.2	1.29	19.3
Cherokee .....	127,800	79	691.7	0.54	8.8
Chester .....	260,023	99	729.7	0.28	7.4
Chesterfield .....	310,000	135	12,491.6	4.03	92.5
Clarendon .....	228,500	187	5,196.8	2.27	27.8
Colleton .....	465,000	186	1,733.1	0.37	9.3
Darlington .....	208,500	177	2,458.8	1.18	13.9
Dillon .....	144,100	143	2,625.8	1.82	18.4
Dorchester .....	268,200	65	2,870.0	1.07	44.2
Edgefield .....	172,641	51	401.5	0.23	7.9
Fairfield .....	338,957	94	1,510.4	0.45	16.1
Florence .....	293,900	345	10,873.8	3.70	31.5
Georgetown .....	415,600	169	2,536.1	0.61	15.0
Greenville .....	267,800	207	900.5	0.34	4.4
Greenwood .....	198,913	76	1,037.1	0.52	13.6
Hampton .....	239,500	38	307.3	0.13	8.1
Horry .....	557,600	329	16,957.6	3.04	51.5
Jasper .....	280,000	121	1,781.4	0.64	14.7
Kershaw .....	336,500	156	6,889.2	2.05	44.2
Lancaster .....	199,400	87	1,168.4	0.59	13.4
Laurens .....	244,735	104	1,461.1	0.60	14.0
Lee .....	110,600	79	3,266.7	2.95	41.4
Lexington .....	291,500	112	1,102.4	0.38	9.8
Marion .....	224,700	151	2,747.4	1.22	18.2
Marlboro .....	150,600	302	10,040.4	6.67	33.2
McCormick .....	144,840	35	390.0	0.27	11.1
Newberry .....	205,003	45	433.1	0.21	9.6
Oconee .....	259,252	80	438.6	0.17	5.5
Orangeburg .....	318,800	608	16,257.6	5.10	26.7
Pickens .....	190,100	75	508.9	0.27	6.8
Richland .....	289,500	165	3,809.2	1.32	23.1
Saluda .....	149,956	27	327.8	0.22	12.1
Spartanburg .....	208,300	96	2,794.0	1.34	29.1
Sumter .....	205,400	148	2,516.7	1.23	17.0
Union .....	157,894	50	395.5	0.25	7.9
Williamsburg .....	429,800	166	3,571.8	0.83	21.5
York .....	226,300	149	1,759.5	0.78	11.8
TOTALS .....	11,300,008	6,643	147,840.3	1.31	22.3

TABLE 10—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1946-47 .....	11,655,623	6,601	232,040.2	1.99	35.2
1947-48 .....	11,542,170	3,149	46,959.8	.41	14.9
1948-49 .....	11,789,643	5,166	91,668.2	.78	17.7
1949-50 .....	11,300,008	8,424	240,504.3	2.13	28.5
1950-51 .....	11,300,008	6,643	147,840.3	1.31	22.3
5-year average .....	11,517,490	5,997	151,802.6	1.32	25.3

TABLE 11—SEEDLING DISTRIBUTION—BY LAND CLASSIFICATION—1950-51

LAND OWNERSHIP	Slash	Loblolly	Longleaf	Arizona Cypress	Red Cedar	Total
Farms .....	4,891,350	3,042,400	520,025	71,550	8,900	8,534,225
Other Individuals .....	12,000	....	....	....	....	12,000
Associations and Clubs .....	124,000	12,000	....	....	....	136,000
Schools .....	54,500	19,000	5,500	....	....	79,000
State Forests .....	937,500	....	10,000	2,000	....	949,500
Other State Lands .....	45,000	3,000	25,000	2,200	....	75,200
Cities, Towns and Counties .....	19,100	18,000	3,000	4,000	....	44,100
Forest Industries .....	4,474,000	2,174,340	100	100	....	6,648,540
Other Industrials .....	1,989,000	954,250	69,000	4,000	500	3,016,750
Federal Lands .....	....	1,000,000	100,000	....	....	1,100,000
State Totals .....	12,546,450	7,222,990	732,625	83,850	9,400	20,595,315
Out-of-State .....	10,000	....	10,000	....	....	20,000
GRAND TOTALS .....	12,556,450	7,222,990	742,625	83,850	9,400	20,615,315



TABLE 12—1950-51 DISTRIBUTION—COUNTIES—SPECIES—AMOUNTS

COUNTY	Slash	Longleaf	Loblolly	Cypress	Cedar	Total
Abbeville .....	483,000	15,000	691,000	.....	.....	1,189,000
Aiken .....	1,168,500	105,500	19,500	2,100	200	1,295,800
Allendale .....	950,000	3,000	61,000	.....	.....	1,014,000
Anderson .....	78,000	.....	46,500	1,000	500	126,000
Bamberg .....	59,000	8,200	1,000	.....	.....	68,200
Barnwell .....	667,000	25,000	.....	700	300	693,000
Beaufort .....	220,000	3,000	.....	2,000	.....	225,000
Berkeley .....	200,100	.....	6,500	1,000	.....	207,600
Calhoun .....	168,000	5,000	10,000	6,000	300	189,300
Charleston .....	68,000	15,000	3,000	1,200	.....	87,200
Cherokee .....	19,000	500	304,000	.....	.....	323,500
Chester .....	12,000	26,400	394,700	2,000	.....	435,100
Chesterfield .....	219,000	4,000	20,000	.....	.....	243,000
Clarendon .....	73,000	13,500	20,000	.....	.....	106,500
Colleton .....	570,000	13,000	12,000	2,000	2,000	599,000
Darlington .....	96,400	25,600	59,000	2,500	500	184,000
Dillon .....	63,000	16,000	2,000	3,000	.....	84,000
Dorchester .....	39,500	19,000	15,000	4,000	.....	77,500
Edgefield .....	130,000	25,500	202,500	3,000	500	361,500
Fairfield .....	500	.....	147,500	.....	.....	148,000
Florence .....	55,000	15,000	8,000	2,000	500	80,500
Georgetown .....	592,000	.....	.....	.....	.....	592,000
Greenville .....	51,000	4,750	66,250	2,000	500	124,500
Greenwood .....	175,000	13,500	173,000	1,000	.....	362,500
Hampton .....	407,500	1,000	.....	2,000	.....	410,500
Horry .....	456,000	15,000	5,000	.....	.....	476,000
Jasper .....	578,000	10,000	.....	2,000	.....	590,000
Kershaw .....	1,845,000	63,500	635,000	2,000	.....	2,545,500
Lancaster .....	.....	12,250	547,750	.....	.....	560,000
Laurens .....	52,500	2,500	207,344	.....	500	262,844
Lee .....	58,000	13,500	235,000	4,000	.....	310,500
Lexington .....	448,500	78,500	62,000	6,700	1,500	597,200
Marion .....	42,000	3,000	10,000	1,000	.....	56,000
Marlboro .....	55,000	5,000	14,500	3,000	.....	77,500
McCormick .....	164,500	18,500	303,000	2,000	.....	488,000
Newberry .....	6,500	4,100	1,094,996	100	.....	1,105,696
Oconee .....	62,000	100	133,400	.....	.....	195,500
Orangeburg .....	588,600	21,300	63,000	5,000	200	678,100
Pickens .....	11,500	500	108,000	600	.....	120,600
Richland .....	179,900	16,350	16,500	3,500	500	216,750
Saluda .....	193,500	9,100	77,500	.....	.....	280,100
Sumter .....	961,900	52,100	73,500	5,000	500	1,093,000
Spartanburg .....	36,750	6,825	297,200	5,200	100	346,075
Union .....	14,050	25,050	851,350	3,050	500	894,000
Williamsburg .....	222,250	.....	14,000	.....	.....	236,250
York .....	5,500	18,000	211,500	3,200	300	238,500
State Totals .....	12,546,450	732,625	7,222,990	83,850	9,400	20,595,315
Out-of-State .....	10,000	10,000	.....	.....	.....	20,000
GRAND TOTALS .....	12,556,450	742,625	7,222,990	83,850	9,400	20,615,315

**S. C. STATE COMMISSION OF FORESTRY**  
**DIVISION OF STATE PARKS**  
**Summary of State Park Use, July 1, 1950 - June 30, 1951**

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Fish- ermen	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathhouse Users	No. Out-of- State Cars	Total No. of Cars	No. Visitors Under 18	Total No. of Visitors
Aiken .....	....	....	1,029	1,252	13,364	6,016	3,031	875	7,094	10,894	23,174
Barnwell .....	....	....	475	614	20,139	7,261	3,186	682	9,986	10,791	32,161
Campbell's Pond (N) .....	....	....	1,180	352	2,336	2,675	958	1,116	2,526	4,018	8,394
Cheraw .....	637	4,187	11,085	4,784	51,724	61,949	22,752	17,981	48,030	93,899	183,460
Chester .....	....	....	3,405	730	34,702	....	....	2,198	17,884	23,221	70,906
Croft .....	....	....	....	1,536	23,237	25,461	25,461	632	26,556	56,259	107,384
Edisto Beach .....	295	1,440	2,506	2,273	17,182	14,153	3,293	762	10,632	23,569	49,936
Givhans Ferry .....	203	1,212	....	608	30,688	7,684	1,786	450	13,750	17,964	53,967
Greenwood .....	....	....	8,955	3,326	49,390	....	....	....	27,865	27,695	109,640
Greenwood (N) .....	....	....	....	55	2,190	....	....	....	580	1,895	3,105
Hunting Island .....	....	....	8,875	3,518	20,254	33,326	9,584	5,331	23,945	18,165	98,576
Hunting Island (N) .....	....	....	230	385	3,603	3,920	....	490	3,107	2,854	13,060
Kings Mountain .....	....	....	2,121	2,327	30,364	17,286	13,203	25,903	32,036	72,677	162,543
Lee .....	....	....	2,800	1,198	34,661	19,683	4,850	612	18,896	24,387	62,971
Myrtle Beach .....	1,334	7,392	23,932	3,495	50,342	46,180	2,103	18,837	48,219	25,991	159,032
Oconee .....	1,709	8,656	....	4,251	27,212	23,428	7,509	506	26,170	9,580	119,731
Paris Mountain .....	....	....	....	7,862	75,540	18,417	15,927	4,370	55,937	70,990	237,864
Poinsett .....	423	2,882	999	3,650	50,421	19,896	16,873	1,992	22,270	35,784	107,532
Mill Creek (N) .....	....	....	49	644	8,631	7,386	7,413	88	2,827	6,963	19,715
Rivers Bridge .....	....	....	246	380	11,070	7,150	155	450	12,264	17,448	34,738
Santee .....	....	....	2,792	1,627	17,555	6,003	....	514	9,103	16,141	39,168
Sesqui-Centennial .....	....	....	3,520	21,743	251,623	254,317	15,516	22,595	123,912	227,611	583,673
Table Rock .....	1,357	8,163	2,512	5,949	72,704	35,780	8,821	6,446	60,362	95,214	233,966
Colleton Wayside .....	....	....	....	1,609	8,705	....	....	6,264	12,741	8,319	62,917
Greenwood Wayside .....	....	....	....	21	456	....	....	....	124	200	646
<b>TOTAL .....</b>	<b>5,958</b>	<b>33,932</b>	<b>76,711</b>	<b>74,189</b>	<b>908,693</b>	<b>617,971</b>	<b>162,421</b>	<b>119,094</b>	<b>616,816</b>	<b>902,529</b>	<b>2,578,259</b>







Everyone in the state is affected by the economic and recreational opportunities of the forest resources of South Carolina. Helping people to make fullest use of these resources is the job of the State Commission of Forestry.



STATE OF SOUTH CAROLINA

**REPORT**

OF THE

**STATE COMMISSION OF FORESTRY**

FOR THE YEAR

JULY 1, 1951 TO JUNE 30, 1952

CHARLES H. FLORY, State Forester

**Silver Anniversary**

COLUMBIA, S. C.

Printed Under the Direction of the  
State Budget and Control Board

# TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL .....	5
PERSONNEL .....	6
SUMMARY .....	11
Recommendations .....	18
FOREST FIRE PROTECTION .....	21
Forest Area Protected .....	28
Forest Fire Protection Organization .....	28
Protection Personnel .....	30
Fire Protection Activities .....	32
Improvements, Maintenance, and Equipment .....	35
Equipment .....	40
Forest Fire Summary .....	44
FOREST MANAGEMENT .....	47
Management Assistance .....	51
Reforestation .....	54
Cone Collection .....	57
Forest Survey .....	58
Cooperative Forest Management .....	59
State Forests .....	59
Cassatt State Forest .....	60
Harbison State Forest .....	60
Manchester State Forest .....	60
Sand Hills State Forest .....	65
STATE PARKS .....	71
Two New Parks .....	74
Historic Areas .....	79
State Parks for Negroes .....	81
Summary of State Park Facilities .....	83
INFORMATION AND EDUCATION .....	85
The Turning Point .....	87
How Big is a Little Tree? .....	88
Commission Motion Picture—"By Our Own Hand" .....	91
Commission Photograph—"The Hand Behind The Little Tree" .....	93
Commission Posters .....	94
Recommendations for Teaching Fire Prevention in South Carolina .....	96
Cooperative Forest Fire Prevention Campaign .....	98
More Trees For South Carolina .....	99
Forestry Demonstrations .....	100
Conservation Week and Arbor Day .....	101
Towersite Improvement Contest .....	101
Motion Pictures .....	102
Vocational Agriculture School Forests .....	103
Talks .....	105
Radio .....	106
Exhibits .....	107
Publications and Posters .....	110
News Releases .....	113
Boys' Forestry Camp .....	114
South Carolina Tree Farm System .....	115
ADMINISTRATION .....	116
Commission Organization Chart .....	118
APPENDIX .....	119



*To Honorable James F. Byrnes, Governor, and to the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1951 to June 30, 1952.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
A. Leland Slade, Jr., *Chairman*.

## THE STATE COMMISSION OF FORESTRY

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Sesqui-Centennial State Park, Marshall Holder, Supt., Columbia, S. C.

Table Rock State Park, R. A. Cole, Supt., Pickens, S. C.

Colleton Wayside Park, N. A. Carter, Caretaker, Canadys, S. C.

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\*These two branches serve both the Division of Forestry and the Division of State Parks.

\*\*Includes area for Negroes.

## DIVISION OF FORESTRY

### Branch of Forest Management

E. C. Pickens, Assistant State Forester, Management  
 A. A. Lehocky, Management Assistant  
 Howard R. Scott, Management Assistant

### Branch of Forest Fire Control

John R. Tiller, Assistant State Forester, Protection  
 W. J. Barton, Fire Control Assistant  
 John M. Shirer, Fire Control Assistant  
 John R. McLees, Fire Control Assistant  
 J. M. Geddings, Communications Engineer-Telephone  
 R. M. Littlejohn, Communications Engineer-Radio

\* \* \* \*

Cole L. Page, District Forester, Aiken, S. C.  
 Archie C. Craft, Jr., Assistant Forester, Orangeburg, S. C.  
 John Levis LeRoy, Assistant Forester, Aiken, S. C.  
 Adrian Lee Pardue, District Ranger, Aiken, S. C.

Vern H. Cutler, District Forester, Camden, S. C.  
 Hugh McQueen Westbury, Assistant Forester, Camden, S. C.  
 Melvin Rodgers, Assistant Forester, Camden, S. C.  
 Maurice I. Stucker, Assistant Forester, Camden, S. C.  
 J. Levi Branham, District Ranger, Camden, S. C.

Alvin E. Kunz, District Forester, Florence, S. C.  
 Wm. M. Lindsey, Assistant Forester, Florence, S. C.  
 Robert N. McCombs, Assistant Forester, Florence, S. C.  
 C. Ray Anderson, District Ranger, Florence, S. C.

Chauncey R. Nichols, District Forester, Kingstree, S. C.  
 Claude F. Barden, Assistant Forester, Kingstree, S. C.  
 John Elton Graham, Assistant Forester, Kingstree, S. C.  
 John R. Grubbs, District Ranger, Kingstree, S. C.

E. L. Middleswart, District Forester, Newberry, S. C.  
 Harry Avedisian, Assistant Forester, Newberry, S. C.  
 Gene M. Harris, Assistant Forester, Newberry, S. C.  
 Clifton T. Carter, Timber Marker, Chester, S. C.  
 Melton Wall, District Ranger, Newberry, S. C.



- C. A. Broadway, District Forester, Spartanburg, S. C.  
 Ralph W. Evans, Assistant Forester, Pickens, S. C.  
 Frederick Wm. Horn, Assistant Forester, Spartanburg, S. C.  
 Paul C. Bowie, District Ranger, Spartanburg, S. C.
- Boris Hurlbutt, District Forester, Walterboro, S. C.  
 Marvin T. Gaffney, Assistant Forester, Walterboro, S. C.  
 J. T. Hance, Assistant Forester, Walterboro, S. C.  
 Joseph W. Goldman, District Ranger, Walterboro, S. C.
- Randolph B. Lee, Director, Sandhills State Forest, Patrick, S. C.
- C. W. Nuite, Director, Manchester State Forest, Wedgefield, S. C.
- L. M. Staley, Nurseryman, Wedgefield, S. C.  
 Abbeville Unit Ranger, Charlie Shaw, Lowndesville, S. C.  
 Aiken Unit Ranger, (J. Ramie Yonce, Aiken, S. C., resigned June 11, 1952)  
 Allendale Unit Ranger, W. W. Brunson, Allendale, S. C.  
 Anderson Unit Ranger, John E. Embler, Anderson, S. C.  
 Bamberg Unit Ranger, P. H. Cave, Olar, S. C.  
 Barnwell Unit Ranger, S. E. Moore, Barnwell, S. C.  
 Beaufort Unit Ranger, R. W. Wisner, Beaufort, S. C.  
 Berkeley Unit Ranger, Harold McCoy, Bonneau, S. C.  
 Calhoun Unit Ranger, Hampie F. Ott, St. Matthews, S. C.  
 Charleston Unit Ranger, K. W. Leland, Charleston, S. C.  
 Cherokee Unit Ranger, B. T. White, Gaffney, S. C.  
 Chester Unit Ranger, J. Gill Simpson, Chester, S. C.  
 Chesterfield Unit Ranger, W. M. Smith, Chesterfield, S. C.  
 Clarendon Unit Ranger, Elliott E. Rose, Manning, S. C.  
 Colleton Unit Ranger, E. H. Benton, Walterboro, S. C.  
 Darlington Unit Ranger, Alton Yarborough, Darlington, S. C.  
 Dillon Unit Ranger, Ernest S. Oliver, Dillon, S. C.  
 Dorchester Unit Ranger, W. P. Johnston, Reevesville, S. C.  
 Edgefield Unit Ranger, S. G. Reel, Edgefield, S. C.  
 Fairfield Unit Ranger, R. E. Patrick, Winnsboro, S. C.  
 Florence Unit Ranger, Preston Tendall, Florence, S. C.  
 Georgetown Unit Ranger, Laurin T. Sessions, Georgetown, S. C.

- Greenville Unit Ranger, G. G. Paris, Greenville, S. C.  
 Greenwood Unit Ranger, James C. Smith, Jr., Greenwood,  
 S. C.  
 Hampton Unit Ranger, J. D. Peebles, Early Branch, S. C.  
 Horry Unit Ranger, W. E. Watts, Conway, S. C.  
 Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland, S. C.  
 Kershaw Unit Ranger, L. E. Smith, Camden, S. C.  
 Lancaster Unit Ranger, A. A. Plyler, Lancaster, S. C.  
 Laurens Unit Ranger, H. E. Martin, Laurens, S. C.  
 Lee Unit Ranger, E. B. Stuckey, Bishopville, S. C.  
 Lexington Unit Ranger, V. S. Bickley, Lexington, S. C.  
 Marion Unit Ranger, Hoyt Collins, Marion, S. C.  
 Marlboro Unit Ranger, Malcolm Lee Covington, Bennetts-  
 ville, S. C.  
 McCormick Unit Ranger, G. L. Sharpton, McCormick,  
 S. C.  
 Newberry Unit Ranger, Marvin E. Wilson, Newberry, S. C.  
 Oconee Unit Ranger, D. O. Morgan, Walhalla, S. C.  
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg,  
 S. C.  
 Pickens Unit Ranger, C. H. Gravely, Pickens, S. C.  
 Richland Unit Ranger, T. W. Cooper, Columbia, S. C.  
 Saluda Unit Ranger, H. B. White, Saluda, S. C.  
 Spartanburg Unit Ranger, D. H. Clayton, Spartanburg,  
 S. C.  
 Sumter Unit Ranger, L. G. Cubbage, Sumter, S. C.  
 Union Unit Ranger, James G. Long, Union, S. C.  
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree,  
 S. C.  
 York Unit Ranger, E. G. Foster, York, S. C.  
 Note: Personnel listed occupied position as of June 30, 1952.



## SUMMARY

The fiscal year covered by this annual report—1951-52 marks the 25th anniversary of the S. C. State Commission of Forestry. The significant progress made since 1927 is the direct result of the efforts of a great many people in South Carolina that have supported the movement for forest conservation. This silver anniversary observance is a tribute to those people. Their work began long before 1927. Arousing interest in forestry was their first objective. Their second was the establishment of the Commission.

It is logical that the philosophy guiding this state agency for a quarter of a century was the original philosophy of the early leaders. Their basic conception embraced the belief that forest conservation was everybody's job. They further believed that that job would be accomplished if all of the people had all of the facts. Their approach was basically educational in character. That approach is still followed by the Commission.

Progress has been made in all of the fields of activity. An outstanding system of State Parks has been established. Forest Fire Protection has been extended to all forest lands in the state. Professional forestry advice and assistance to woodland owners is available to any person in South Carolina on request. An excellent forest tree seedling nursery has been developed which is capable of producing 30 to 35 million trees annually. It can also be expanded.

Four state forests serve as demonstrational areas which assist with the teaching of principles of forest conservation as well as reclaiming badly used land.

An effective educational program has been developed, involving the participation of all personnel.

However, a great many problems must yet be solved. Since 93% of the forest land in the state is in private ownership, the major effort of the Commission must be directed toward helping landowners solve their individual woodland problems. The rewards of improving woodland productivity are great. At present these lands are producing a third to a half of their potential. Even so, they support a 300 million dollar industry. Full production could make a substantially increased contribution to the state's economy.

The observing of this silver anniversary of the Commission is a re-dedication of this agency to that task.

### **Forest Fire Protection:**

In 1927 only a few landowners in South Carolina had established even limited measures for the protection of their forest lands from fire.

Forest fires burned at will. Some stopped when they reached a highway or river. If the wind was high these barriers had no effect and some fires burned until it rained. Legend has it that after the turn of the century one fire burned across the lower part of South Carolina from the Savannah River to the Atlantic Ocean.

With the creation of the Commission, limited protection was achieved in a few cases by its efforts to bring landowners together in a common cause. As time proved the soundness of this approach, protection was extended county wide. This pattern progressed gradually from 1934 to 1945, at which time 24 of the 46 counties had developed county wide protection. At this time the movement had gained sufficient momentum for the establishment of state wide forest fire protection.

While this was a milestone, it was not adequate protection. Fire losses have been tremendously reduced. Both number of fires and acreage lost have been reduced, but we still have a 5-year average of 5,673 illegal fires burning 127,083 acres. In addition there are many landowners who unwisely burn their own woods. This example contributes to the general apathy to fire in many communities, especially in the low country. These landowner-set fires are within the law and are not included in the figures for illegal fires.

To achieve adequate protection, the number of fires must be reduced through an intensified prevention program. This would reduce the peak load, releasing our limited equipment and manpower to improve efficiency. Some additional equipment and communications facilities are needed. Other needs are covered in the section of this report headed "Recommendations".

### **Forest Management:**

The 25-year period of the Commission's service to the people of South Carolina has shown outstanding progress in answering



the landowner's perpetual question, "What should I do with my woodland". The importance of correct answers is seen from the fact that 93% of the forest land in the state is in private ownership. Of this amount the greater portion is in farms. Most of the forest land is in the hands of 108,000 landowners. These small ownerships contribute a substantial part of the timber wealth of the state. On the average, they also represent the poorest examples of forest management. Therefore, the problem is encouraging people to apply proper forest practices.

In 1927 it was virtually unheard of for a farmer or other small landowner to have a professional forester visit his land and assist him with his woodland problems. Today a number of foresters from various organizations are available to the landowner. During the fiscal year 1951-52, the Commission provided this service to 919 landowners in cooperation with the Clemson College Extension Service. This program is also facilitated by many groups associated with problems of land use, including the teachers of Vocational Agriculture, Soil Conservation Service, Production and Marketing Administration, and others. This quarter-century period has also seen the development of the activity of private consulting foresters and foresters employed by wood using industries and associations in this



Nearly 60% of South Carolina is forest land. About 108,000 individuals own this forest land, with most of the land in relatively small holdings.



field. As a result, there are today more and more landowners following productive forest practices. Intensified education, however, is still needed more than ever before. Industrial use of wood in this state has expanded and we have the opportunity to support even greater industrial growth and to produce greater timber yields to landowners.

Another significant development of the Commission in the field of forest management is the reforestation program. The Horace L. Tilghman forest tree nursery at Wedgefield in Sumter County is one of the finest in the nation. More and more landowners have taken advantage of this facility of the Commission to put some of their idle lands to work.

However, it is estimated that if South Carolina is to reach its greatest timber growing capacity, more than 11½ million acres of idle or unproductive land must be planted to trees. In recent years this program has resulted in the planting of 20 to 30 thousand acres per year. At the rate of 30 thousand per year it would require 50 years for the landowners to plant the 11½ million acres. Obviously it would be good economics to intensify this program, because fifty years in South Carolina represents several successive crops of timber.

The four state forests operated by the Commission are serving as excellent proving grounds for forestry methods. They are open to the public and are filling an educational need by demonstrating these practices.

Their combined area only represents 1% of the forest land area in the state, but their educational influence is far reaching. This work needs greater intensification to accomplish this purpose. In a few years these areas could become more than self supporting with better financing now.

### **State Parks:**

South Carolina's excellent system of 21 State Parks does not date back to the creation of the Commission in 1927. However, the early leaders in the forestry movement also recognized the need for the development of these wholesome recreational areas the whole family could enjoy. They believed, further, in the teaching value of a state park as a conservation out-of-door classroom. Early groundwork in developing sentiment among local leaders produced concrete results when the CCC program entered





Picnicking and swimming are the most popular activities enjoyed by the  $3\frac{1}{3}$  million people who visited South Carolina's State Parks during the year.



the field. Local people wanted the business stimulus of a CCC camp and they wanted a State Park. In 1934 Cheraw, Aiken, Poinsett, Myrtle Beach, Givhans Ferry, and Kings Mountain State Parks lead the way. Myrtle Beach was the first to open, July 1936. Poinsett and Aiken followed in August 1936.

The popularity of the present system is attested by the 1951-52 attendance of over 3 million visitors.

This progress has also had its toll on facilities which were largely built and donated to the state by the CCC. They were never designed for this heavy use, but the fact is, the state has the system and the people want it. Increased population, more leisure time, and the greater mental pressure of modern living create more need for state parks year by year. Furthermore they serve as a vital drawing card for industries looking for a desirable location. The conclusion is existing facilities must be better financed. An equally important conclusion is additional facilities should be provided for negroes.

#### **Administration:**

There were ninety-six (96) resignations of technical and other personnel during the year. Sixty-nine per cent (69%) of the total were County Unit personnel.

The Commission budgeted and spent on all phases of the Forestry and Park Program \$1,581,472.07. Of this total the Division of Forestry expended \$1,206,672.07, and Division of Parks \$374,800.00. State appropriated funds amounted to \$865,950.00 for the Division of Forestry and \$424,800.00 for the Division of Parks.

#### **Information and Education:**

The quarter-century Commission from its beginning has been based upon educating the public in the field of forest conservation. Indeed, the creation of this state agency in 1927 followed intensive educational activity on the part of public spirited leaders in the state. Since that time every phase of its operation has been approached from an educational standpoint.

Constant effort is made to instill in employees an appreciation of the need for every person in the organization to do his part or her part of the educational job.



Progress has certainly been made, but here again, observing this silver anniversary is keyed to analyzing progress only in the light of the job yet to be done.

The most significant development in the informational and educational program was the decision made in June 1950 to develop a fresh approach to forest fire prevention. This has become known as the Little Tree approach, because of emphasis on the theme that "Even little fires kill little trees". Since June 1950, this simple approach has been broadened into a major program of the Commission. It follows a basic forest fire prevention plan. It is keyed to regular employees, especially county personnel. The most important feature of the carrying out of the program is the use of a 35 mm. slide projector and colored slides in each county. Fire fighters are becoming effective teachers. This program is described in detail in the report of the branch of information and education elsewhere in this report (see index).

Fire prevention receives major emphasis because woods fires constitute the greatest problem in achieving full woodland production. This has to come first.

Of equal importance after nature's full powers of forest reproduction are assured, is the problem of unwise cutting practices. The big job is reaching the 108 thousand private landowners who own most of the woodland area of the state. Custom and financial pressure of the moment have dictated methods of harvesting the timber crop in most cases, especially on small ownerships. The Commission has tried to teach that:

- (1) timber should no more be sold "by the boundary" than cotton by the field.
- (2) timber should no more be sold "down to a specific diameter limit" than cattle down to a weight limit.

This has been taught in a positive way by recommending a forester marking individual trees for sale and the price determined on the basis of "per thousand board feet" and measured by the forester before the tree is cut.

This method gives full value and provides for the maximum production of timber per acre.

Education must be intensified in this field to enable landowners to take full advantage of professional forestry services

available to him. It will mean more money for the landowner in the long run and it will mean a greater prosperity in South Carolina.

A significant development in education in the field of State Parks was the inauguration of the "Ranger Parks" school-of-the-air series of radio programs. The fiscal year 1951-52 marked the completion of the first full year of this project. During this year 31 weekly 15-minute programs were broadcast by 10 radio stations in South Carolina. Technical assistance and production facilities are donated by station WIS in Columbia. The tape recording is copied by the Commission with its own equipment and mailed to the 9 other stations carrying the series also as a public service feature.

"Ranger Parks" develops a general appreciation of nature and the natural history study facilities provided by State Parks.

#### **Recommendations:**

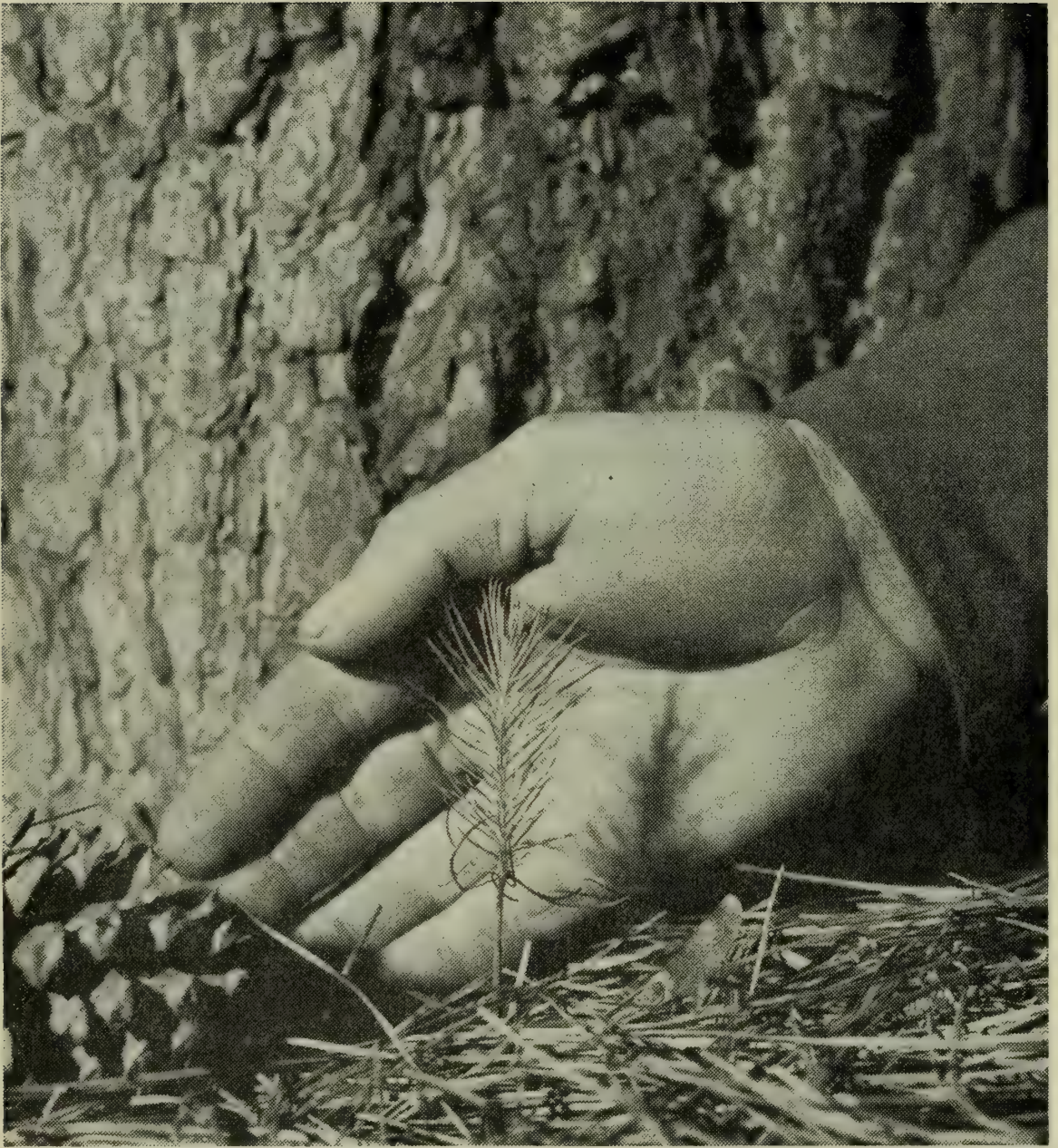
The major functions of the S. C. State Commission of Forestry, as charged by statute, are: protection of the private forest lands of the state from fire, insects, and disease; assistance to private woodland owners in the development and management of their woodlands, and in the utilization, harvesting and marketing of their forest products; the establishment, development, and operation of a system of State Parks.

To enable the Commission to more effectively do this job, the following recommendations are made:

- (1) A vastly intensified forest fire prevention program which is carefully calculated to consistently reduce fire occurrence to an absolute minimum within a reasonable length of time.
- (2) Additional manpower, heavy power equipment, hand tools, and radio communications to greatly intensify forest fire suppression and reduce excessive losses; some revision of existing fire laws to prevent any use of fire in woods during critical periods.
- (3) Adequate maintenance of existing capital improvements, equipment and tools in activities of both the division of forestry and the division of state parks.



- (4) Increase the production of forest tree seedlings needed to reforest the 11½ million acres of idle land in the state.
- (5) Rehabilitate the four state owned and leased demonstrational forest areas to bring them into full production without further delay.
- (6) Adequate operations and facilities for the existing state parks to keep pace with the greatly increased public use.
- (7) Provide adequate facilities in existing state parks for negroes, and new facilities in the metropolitan Columbia area.
- (8) Provide adequate salaries and wages for personnel to encourage employment of competent and satisfactory employees.



**The Little Tree. The symbol of Forest Fire Protection in South Carolina. Using the slogan, "Even a Little Fire Kills Little Trees," fire control forces are making good progress in reducing the occurrence of man-caused fires in the state.**



## FOREST FIRE PROTECTION

With twenty-five years of progress made in forest fire control in South Carolina, it is timely that we look back to such progress as has been made, and forward to such improvement as needs to be made.

Adequate forest fire protection for all woodland areas in the state was a part of the overall forestry plan conceived in 1928 by the Commission of Forestry for ultimate achievement. The overall objective of adequate fire control is protection to all woodlands sufficient to make ownership of forest property for timber production a reasonable and acceptable economic risk. After twenty-five years of protection, our five-year average annual area burned is 130,000 acres, or 1.15% of the total protected area. *Such an annual loss does not constitute an acceptable risk either to forest landowners or to the forest industry. This loss must be reduced to a maximum of one-half of one (0.5) percent!*



In the past, before there was any organized fire protection, large areas of valuable timber land burned every year. Each year millions of little trees were killed, resulting in thinly stocked areas such as the one shown on the left. Over the years, fire protection has made it possible for the little trees to live and grow, resulting in more trees and satisfactorily stocked areas such as the one shown on the right.



Area under protection from forest fires increased from a few thousand acres in 1928 to 7,550,000 acres in 1943, and finally, in 1945, the General Assembly authorized protection of all woodland areas in South Carolina, the first state in the southern region to accomplish state-wide protection. Under this set up, a total of 11,300,000 acres of commercial woodland and 1,885,000 acres of idle land and urban woodland are given protection from forest fires. Thus, one phase of the protection program is completed, and one of the several goals reached.

Early records indicate staggering losses in the past due to forest fires. During the period 1916-24, it has been estimated that an average of 5800 fires burned 850,000 acres annually, and that during 1923 alone, 7,000 fires burned 4,000,000 acres. During the fiscal year 1930-31, it was reported that 11,300 fires burned approximately 2,155,000 acres in the state. At the close of the 1944-45 fire season, Commission personnel mapped from an



In the early days of fire protection fires sometimes burned for days. Now most fires are put out in a matter of hours and the average fire is held to less than 22 acres.

airplane all burned areas in Colleton County, as representative of the 24 counties having county-wide protection organizations, and Bamberg County, as representative of the 22 counties in which there was no organized protection. Fires of all causes had burned 3.5% of the total woodland area in Colleton County



and 86.0% of the woodland area in Bamberg County. Such losses are, indeed, alarming when compared with losses during the past five years, during which period *the five-year average* was 5,673 fires which burned 127,083 acres, or 1.12% of the total woodland area protected. Thus, while losses have been drastically reduced during the past twenty-five years and we are approaching a second of the goals of the Commission, it must be pointed out that *state-wide protection does not constitute adequate protection, and current losses from forest fires still is not a reasonable or acceptable risk either to landowners or to forest industry!* With some 102,000 landowners, each owning less than 500 acres of woodland, *many fires still burn over entire ownerships—which is not conducive to large-scale tree planting, improvement cutting or other forest management practices.* Likewise, *forest industry must be supported by well-stocked, fully-producing stands of timber on all commercial forest land, a condition which does not now, by any means, exist.*

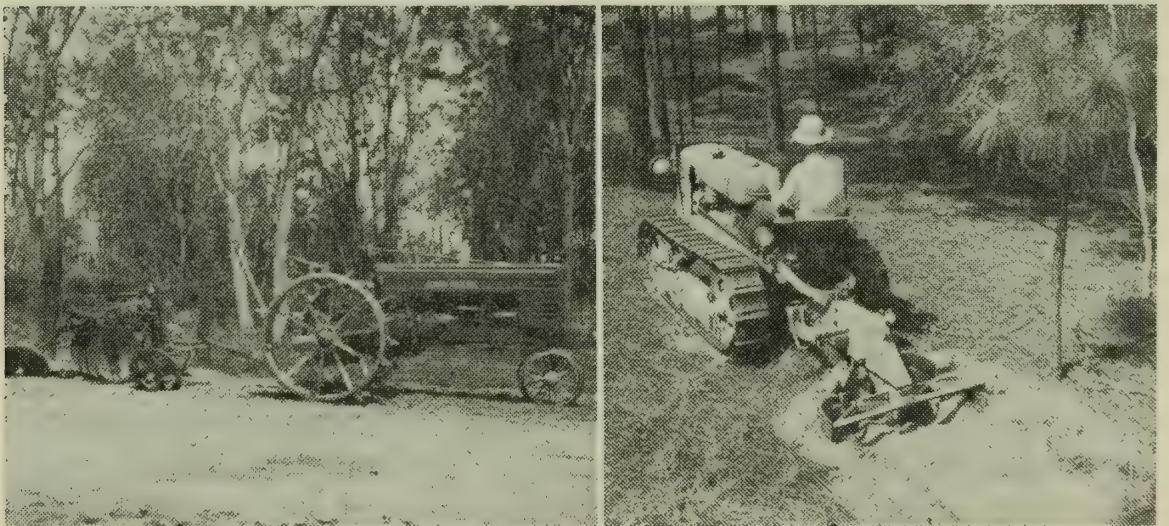
With the knowledge that South Carolina could never finance and maintain an organization and equipment which could assume, as a fire department, the entire responsibility for control of forest fires, *the Commission's fire control formula was based on the fact that the landowner, as steward of his property, must retain the basic responsibility for prevention and control of forest fires.* The state must maintain, on the other hand, an organization to aid the landowner in doing his job through leadership, training, and basic equipment. To this end, the Commission has perfected an organization comprising a small staff of highly-trained technicians who are administrators, training officers and engineers, and a control organization of district foresters, district rangers, unit rangers, wardens, equipment operators and towermen—*all of whom render the assistance to landowners that they require in order to effectively protect their properties.* A total of 349 full-time personnel is employed in our 46 county protection units. These include 46 rangers, 133 fire wardens, 135 towermen and 35 equipment operators. At the peak of the fire season, *there is one (1) man in the regular organization available for suppression work on each 60,000 acres of woodlands.* In addition, some 3000 persons have been organized into *volunteer* fire crews in many communities, and, each year, thousands of other citizens voluntarily assist in fire suppression work. With minor exceptions, we feel that our organ-



ization is complete—and, thus, still one more of the Commission's objectives has been reached.

Some of the improvements, necessary to adequate protection, have been largely completed. By 1947, the primary detection system had been completed, comprising 135 lookout towers, supplemented by 21 federally-owned and 3 privately-owned towers. The Commission has constructed and is maintaining some 2200 miles of telephone lines, which provide means of locating and reporting fires, and dispatching personnel and equipment to them. This communications system has been supplemented and, in cases, replaced by some 189 two-way radio units. A system of 43 fire danger measurement stations provides fire weather predictions on which our protection activity is based, and which greatly increases our operational efficiency. We owe much to the Civilian Conservation Corps program, for it was during the period 1933-41 that South Carolina moved progressively ahead in its protection program, much of it made possible through contributions of towers, telephone lines and truck trails to South Carolina by the CCC without cost to the state. While our needs still include some additional facilities and a considerable portion of our state-wide radio system, the end of this first twenty-five year period finds the Commission far along in its program of planned fire control improvements.

The Commission is currently equipped with some 13,000 pieces of hand fire fighting tools, much of which is assigned to organized volunteer crews for use in their communities. Our unit rangers are provided with fully-equipped pick-up trucks. Power



Good progress has been made in fire control equipment. The modern fire fighting tractor and plow on the right has replaced the old type equipment on the left. More plowing equipment is needed in several areas in the state.



equipment for fire suppression, a continuously growing necessity due to rough accumulation over a long period of years, consists of 6 light crawler tractors; 27 light semi-crawler tractors; and 4 heavy crawler-type suppression units. Through experimental and development work in our equipment shop, we have greatly increased the efficiency of our existing equipment. *Greater equipment intensity is very necessary to increased suppression efficiency*—the Commission now operates the equivalent of one tractor suppression unit in each 200,000 acres of woodlands, by far insufficient as compared with needs.

The values which the Commission must protect are many and varied and considerable. These values include the harvest of forest products which annually yields a large income to our landowners; the capital value of our forest industries, plus the annual payrolls for processing the raw materials through these industries; and the value of our standing timber resources. In addition, there are such values which also must be protected as recreational values of hunting and fishing, tourist trade, soil and water resources, value of real estate protected, the welfare of the 100,000 persons who depend upon our woodlands for all or a major portion of their livelihood, and the value of the entire crop of trees under five inches in diameter which constitute the forest products of tomorrow and which are most susceptible to damage by wild fires. Uncontrolled fire results in very severe and lasting damage, and brings about greatest losses in total destruction of millions upon millions of little trees which we desperately need to give us future well-stocked stands; in timber values, both from loss of grade and volume, and the resulting effect of loss of stumpage on the social and industrial pattern of the state; and also in flood, erosion and sedimentation damage. Some more minor damage to wildlife, recreational and grazing values are, of course, incurred. It is upon these values that we must gauge our program—our accomplishments and our needs for improvements. Much of the protection of these great values is already accomplished with the inclusion of all woodlands in our protection area, and with the vast reduction of area burned since the tremendous losses of the period 1927-45. Still, *there is urgent need to reduce the large number of fires occurring in the state annually and to further reduce area burned by these uncontrolled fires.*





Little trees and little animals suffer from fires.

Certainly, as we analyze our protection program and problems, we can determine our several needs. Keeping in mind the fact that the Commission is bound by its responsibility to provide a measure of protection assistance to the landowners of the state which will enable them to *adequately* safeguard their forest values, further needs to do the job entrusted to the Commission are, primarily:

1. Additional equipment intensity to offset excessive losses which are now experienced during periods of high fire occurrence;



2. Minor additions of manpower to fill known gaps in our current organization;
3. Additional two-way radio equipment;
4. Some revision of existing fire laws to prevent any use of fire in woods during critical periods;
5. Intensification of the system of organized volunteer crews; and
6. A vastly intensified fire prevention program which is carefully calculated to consistently reduce fire occurrence to an absolute minimum within a reasonable length of time.

*The Commission's fire protection program is not adequate as financing has not been adequate.* The overall annual cost to do the protection job has risen from 2.8 cents per acre in 1929 to 8.9 cents per acre in 1951-52. This increase has been due to rising wages and cost of equipment, and to intensification of fire prevention, presuppression and suppression activities. In 1945, at which time the state undertook a state-wide protection program, the cost estimate to do an *adequate* job was \$1,023,000 annually. During 1945-46, the Commission operated its protection program on a budget of \$718,828, federal funds included. In 1950, with wages and costs still increasing, the cost of financing *adequate protection* was carefully estimated at \$1,353,000, or \$0.12 per acre. During the past fiscal year, 1951-52, the Commission operated its protection program on a budget of \$1,009,999, or a little less than \$0.09 per acre. With apparent federal allotments of some \$251,000 annually, the *state appropriation for forest fire protection must be increased to \$1,102,000 annually, if adequate forest fire protection is to be given our woodlands values, and the goal of the Commission to reduce the average annual burn to a maximum of one-half of one percent is to be reached.* Only with such adequate financing can a measure of fire protection be accomplished which will make ownership of forest properties for timber production in South Carolina a reasonable and acceptable economic risk.

In concluding a summary of the accomplishments of the past twenty-five years in forest fire control, we should recognize the assistance given the Commission in the progress which has been made in this phase of its forestry program. Not in any order

of the importance in the role they played should be listed the press and commercial radio stations, the Governor and the South Carolina General Assembly, forest industries, civic and service organizations, the Garden Clubs and Federated Womens Clubs of South Carolina, the landowners, the hundreds of persons who are organized in volunteer community forest fire crews, and the thousands of citizens who annually assist in the suppression of forest fires. These, with members of the Commission of Forestry and countless others in many walks of life—all sincerely interested in the protection of our forest resources from wild, uncontrolled fires—have contributed much toward the success which has, thus far, been enjoyed by the Commission of Forestry in its program to provide adequate protection for the woodlands of South Carolina.

### **FOREST AREA PROTECTED**

The Commission of Forestry cooperates in furnishing intensive fire protection to a total of 11,300,008 acres of State and private forest land in South Carolina. This total includes 169,217 acres of forest land in State Parks and State Forests.

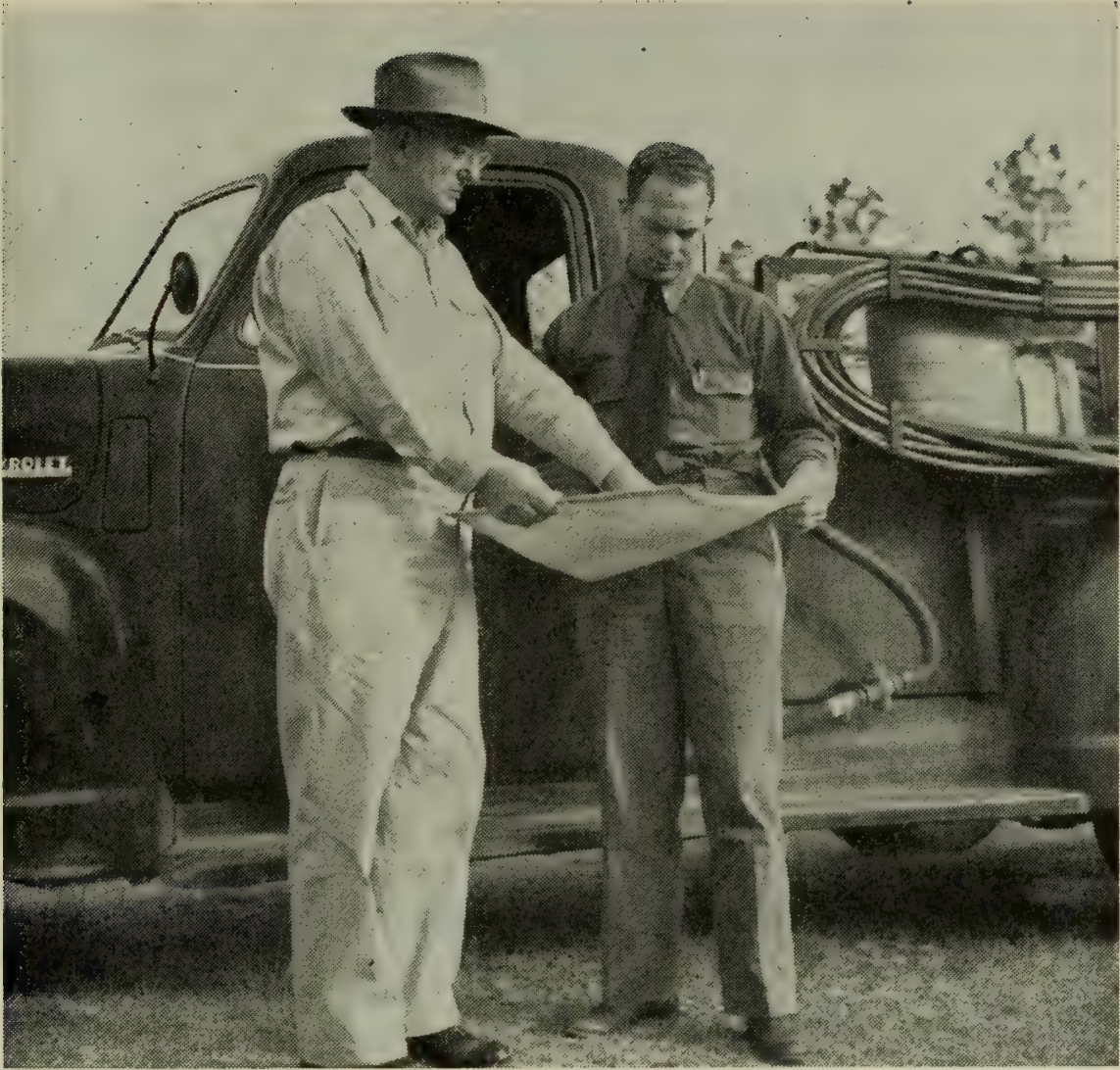
In addition to the State and private lands, the U. S. Forest Service protects 584,492 acres within the National Forest boundaries. In addition, there are some 58,100 acres of woodlands under the jurisdiction of various other Federal agencies. This area is furnished protection by these individual agencies and is not included in the State-wide figure.

### **FOREST FIRE PROTECTION ORGANIZATION**

The fire protection organization is designed to cooperate with all forest landowners in the State in providing adequate protection for their woodland areas. This program does not relieve the landowner of the responsibility of the prevention and control of forest fires on his private holdings. The organization does, however, assist landowners, in every way possible, with trained leadership and equipment in an endeavor to accomplish the type of protection desirable.

For administrative purposes the State is divided into seven forestry districts. All activities within each of these districts are supervised by the District Forester who is responsible to the State Forester.





Unit rangers and district foresters work closely on county fire protection problems.

### County Units:

Fire protection work in each of the County Units is supervised by the individual Unit Rangers under the direction of the District Forester. The Unit Ranger is assisted by Unit Wardens, towermen, tractor operators, and flexible crews, all of which make up the standard County Unit organization which intensifies both fire protection and fire prevention activities on a local basis. All of the Unit personnel are familiar with the landowners and the problems which exist within their localities and furnish their services accordingly.

One of the prime objectives of the County Unit organization is to organize community landowner groups, train and equip them as completely as possible, and assist them in coordinating their efforts and desires in preventing and suppressing forest fires within the neighborhood. During the past year, a total



of 16,614 individuals voluntarily offered their services and actually assisted regular Unit personnel on fires throughout the State.

### **STATE FORESTS AND PARKS**

All of the State Forests and Parks are manned by a staff of personnel who, aside from their other duties, are responsible for the prevention and control of fires on their respective areas. Fire Control personnel in the Central Office, Districts and County Units cooperate in every way possible with both State Forests and State Park personnel in providing assistance not only on going fires but also with programs designed to prevent fire occurring. Fire protection plans for practically all of the State's Parks and Forests have been prepared for use by all personnel in carrying out all Fire Control activities. State Forests and Parks in South Carolina comprise a total of 169,217 acres.

#### **National Forests Protection:**

The two National Forests in South Carolina, the Francis Marion, located in the local Coastal Plains, and the Sumter National Forest in the Piedmont, are provided fire protection by personnel of the U. S. Forest Service. National Forest areas in South Carolina include a total of 584,492 acres.

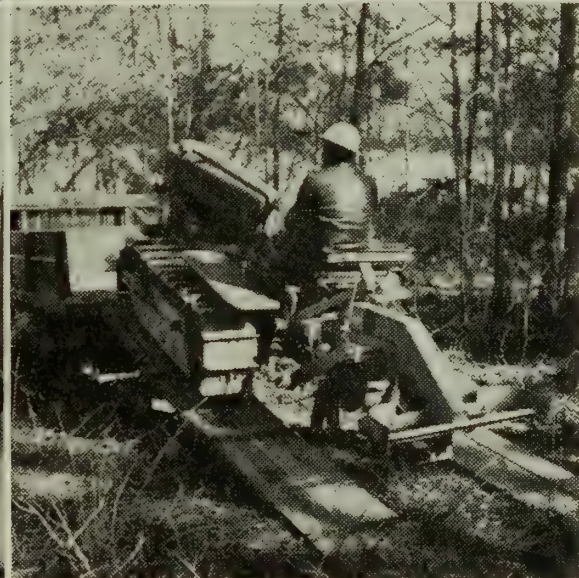
#### **Cooperative Agreements:**

Cooperative forest fire detection and forest fire suppression agreements have been drawn up and put into effect by the U. S. Forest Service and the State Commission of Forestry. These agreements have proven highly beneficial and have contributed much to the fire protection efficiency of both agencies. Definite fire protection boundaries of each agency have been established and the agency having the greatest forest fire protection area in the immediate vicinity of the property in question is responsible for the over-all fire protection job.

### **PROTECTION PERSONNEL**

A considerable turnover in personnel on the County level was experienced during the year. Nevertheless, replacements were made shortly after vacancies occurred and all County Units were





Fire protection in a county unit calls for a wide variety of work from educational programs that include colored slide talks and the use of posters to fire detection and fire fighting.

kept completely organized. Only few changes were made in the individual technical personnel assigned to fire protection work.

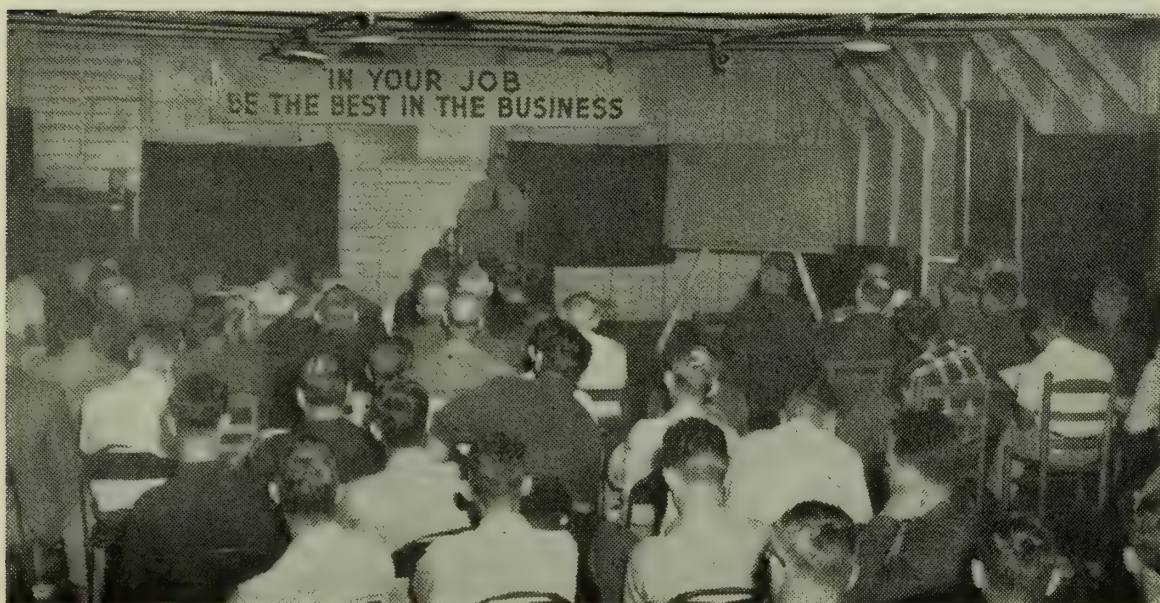
In addition to technical fire control personnel in the Central and District Offices, a total of 349 persons were employed in fire protection and suppression work on full time. This number includes 46 Rangers, 133 Wardens, 35 Tractor Operators, and 135 Towermen. 202 Flexible Crew Members were employed on a part time basis during especially dangerous fire weather and fire occurrence conditions. In addition, 2,217 individuals were organized in the various counties of the State in organized volunteer fire crews. A total of 16,614 other persons assisted the regular Unit organization in fire suppression in their respective communities.



## FIRE PROTECTION ACTIVITIES

### Training:

Training for regular protection personnel of all Districts and Counties, as well as organized volunteers and other persons, was carried out during the year with good results. Periodic training has made possible continued high performance of all fire control personnel in carrying out the various phases of protection work.



Periodic training is a major factor in keeping the fire control organization efficient and in improving its service to the landowners of the state.

During the early fall of 1951, District Training Meetings, attended by all personnel except tractor operators, were conducted throughout the State covering the important phases of protection work with much emphasis on fire prevention.

Shortly after the regular District Meetings, a two day equipment training school was held for all District Office personnel, Unit Rangers, and Unit Tractor Operators. This meeting covered instruction in preventive maintenance, automotive safety, and general instructions relative to the operation of mechanized fire suppression equipment.

Many small group landowner meetings were scheduled in all counties of the State. These meetings were attended by forest landowners within individual communities who were interested in promoting fire protection activities on their individual holdings.



Fire weather permitting, the regular Ranger-Warden weekly meeting was held in the Unit Ranger's office. These weekly meetings are designed to discuss the Unit fire protection program and efficiently plan the activities of all Unit personnel. In addition to these regular scheduled meetings, much on-the-job training was carried out by supervisory personnel. Also, many personal contacts were made with landowners throughout the State to discuss individual fire protection problems and solutions.

### **Inspection:**

Detailed Unit inspections were conducted in the various counties again this fiscal year. These inspections have accomplished much in bringing the organization up to the prescribed standards and greatly increasing the efficiency of the various activities. District Office personnel are responsible for conducting one fire control inspection within the counties of their Districts annually. Also, members of the Central Fire Control Office conducted a number of detailed fire control inspections, usually with assistance from the District Office personnel. Periodic inspections of all automotive equipment was carried out by three traveling mechanics operating out of the Commission's Central Shop and Warehouse in Sumter. These traveling mechanics endeavor to keep all of the mechanized equipment in good operating condition and stress the importance of keeping the various Units ready for routine and emergency calls at all times.

### **Fire Plans:**

Unit Fire Plans which were prepared and put into use in all the County Units, State Forests and Parks some six years ago have greatly increased the over-all efficiency of the Fire Control program. These plans set forth standards and specific procedures for the control and operation of each Unit and are used as a guide by all personnel in carrying out the various work activities. During the fiscal year, a number of State Park Fire Plans were revised, brought up-to-date and tied in more closely with the Plan presently used by local County Fire Control organizations. Some individual property fire plans were prepared for individual landowners.

### **Law Enforcement:**

The enforcement of the State Fire Laws is a major phase of fire prevention activities. Inasmuch as law enforcement is considered an educational phase of the work, all illegal fires were carefully investigated by County Unit and District personnel in an endeavor to determine the responsibility for the fire. In cases where responsibility could be finally determined, the guilty parties were apprehended and tried before local magistrates. A total of 296 persons were prosecuted for starting illegal fires during the year. Of this total 284 persons were convicted. Horry County led the State with 51 prosecutions and 48 convictions. Based on the number of fires occurring however, Oconee County led with one prosecution for each 2.6 fires. Other County Units maintaining high averages were Chesterfield, Lee, Lancaster, Greenwood, Laurens and Newberry.

### **Burning Permit Law:**

A total of seven counties in the State now have Burning Permit Laws which require landowners to first obtain a permit before burning brush, hedgerows, woodlands or field between October 15 and May 15. These counties are Aiken, Orangeburg, Greenville, Georgetown, Charleston, Marlboro and Horry. A total of 10,246 permits were issued in these seven counties during the year. Of this total, only 9 of the fires were allowed to burn areas not intended to be burned by the landowner. 16 persons were prosecuted for the violation of the Burning Permit Law.

### **Southern States Fire Control Conference:**

During the latter part of the fiscal year, all of the Southern States Fire Control Chiefs met jointly with Information & Education Chiefs and State Foresters at Biloxi, Mississippi. Much emphasis was placed on coordinating the efforts of all Southern States in improving over-all forestry conditions. Major topics were forest fire prevention programs centered around small woods fires and the little trees. Also, forest fire danger measurement and damage appraisal was discussed.



## IMPROVEMENTS, MAINTENANCE AND EQUIPMENT

### Lookout Towers:

Of the 157 lookout towers in South Carolina, 133 are owned by the Commission. Twelve of the towers are wooden structures, and 121 are steel. The wooden towers will all have to be replaced in the near future.



One of the pressing needs of the fire control organization is adequate funds for the repairs and maintenance of the 135 tower sites in the state.

### Tower Unit Buildings:

There are 23 tower sites on which the Commission has not erected dwellings for the tower personnel, and 39 sites do not have the necessary barns and other out buildings that are included in a standardized tower site. The improvement program was halted in 1948, due to lack of necessary funds to complete them.

There is much heavy maintenance work needed on all of the tower sites, the total cost of which is now estimated at \$50,000. Needed jobs include new roofs, painting and replacement of sills, porch decks and general repair work.

Present working budgets do not provide for an early remedy to this situation.

**Telephone Lines:**

Telephone line improvements during the year consisted mostly of routine maintenance work by the District and Unit personnel, such as right-of-way clearing, pole, bracket, and insulator replacements, and the clearing of any transmission troubles which developed on the lines.

In addition to routine line maintenance, which included the brushing out of right-of-way along all of the lines, approximately ten miles of new telephone lines were constructed to connect new Fire Control personnel with fire towers and other Fire Control personnel in the various Units. Approximately seven miles of telephone lines were salvaged during the year, which leaves the Commission with approximately 2090 miles of telephone lines in operation at the end of the fiscal year.

In order to modernize and improve telephone service to the greatest possible degree, it is a practice of the Commission to convert from magneto to dial service in any Unit where the commercial company, to which the Commission has an exchange connection, makes the conversion. During the year, the conversion to dial service was made in McCormick, Clarendon, Aiken, Barnwell and Jasper Counties.

The practice of selling telephone lines for the purpose of obtaining funds for the purchase of two-way radio was carried on to the extent that approximately 124 miles of lines were sold during the fiscal year. Radios were purchased with the receipts from these sales and installed in all stations and vehicles affected by the sales.

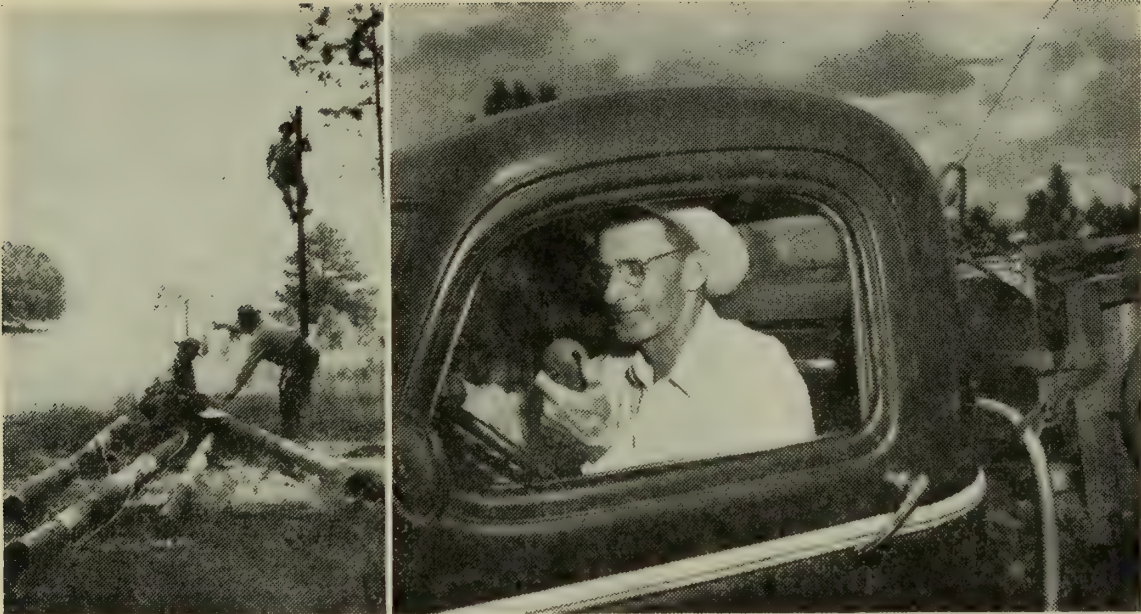
**Radio:**

Continued advancement can again be reported in radio communications for the fiscal year 1951-52.

Every District Office has now been equipped with two-way radio, and plans are being carried out to provide all district offices with an additional receiver and transmitter frequency, permitting them to operate without interfering with tower communications. Mobile units were installed in Aiken and Kingstree District Ranger's vehicles.

The two Fire Control Assistants in Columbia were equipped with mobile units, and are now in a better position to direct fire control activities throughout the state.





Good communications are vital to good fire protection. Increased radio facilities are a step toward better fire protection.

The following radio equipment was installed during the fiscal year:

Fairfield County: White Oak and Jenkinsville Towers, 3 Wardens.

Bamberg County: Bamberg Tower and Ranger.

Orangeburg County: Neeses, Orangeburg, Rowesville, Way and Holly Hill Towers, 2 Tractor Units and 5 Wardens.

Lee County: Bishopville Tower and Ranger.

Kershaw County: Westville, Buffalo and Liberty Hill Towers.

Darlington County: Mont Clare Tower and Ranger.

Berkeley County: 1 Tractor Unit and 1 Warden.

Total State owned Radio Equipment in operation as of July 1, 1952:

77 Mobile Units

1 Handi-Talkie

63 Base Station Units

All tower installations made this year have included a control unit in the tower house as well as the one in the cab of the tower. By throwing a switch at the base of the tower, the operator turns on the control in the house, thus permitting 24 hour communication if needed. Old installations are also being gradually modified for operation from the tower house.

A ten watt mobile unit was installed in an aircraft used for spotting fires, and proved more efficient than the Handi-Talkie previously used for contacting ground crews.

Maintenance and routine checking of all equipment was continued throughout the year.

Private industry operating radio equipment on frequencies assigned to the Forestry Commission added 18 mobile units, making a total of 51.

With additional telephone line sales, and some appropriated funds, the radio program has a better outlook for the fiscal year 1952-53.

Completion of the State-wide radio system should be hastened by additional state-appropriated funds.

### **Firebreaks:**

The operation of firebreak units in the State during the year was confined to large lumber manufacturing and pulp and paper companies, several private operators who work under contract with landowners, numerous landowners who constructed and maintained fire lines with their own equipment, and the Horry County Firebreak Project. The State Commission of Forestry has operated no firebreak construction and maintenance unit for the past several years due to the lack of sufficient funds.

### **Aircraft In Fire Protection:**

The use of aeroplanes for aerial detection of forest fires and used with radio to direct fire fighters on large going fires is no longer an experiment.

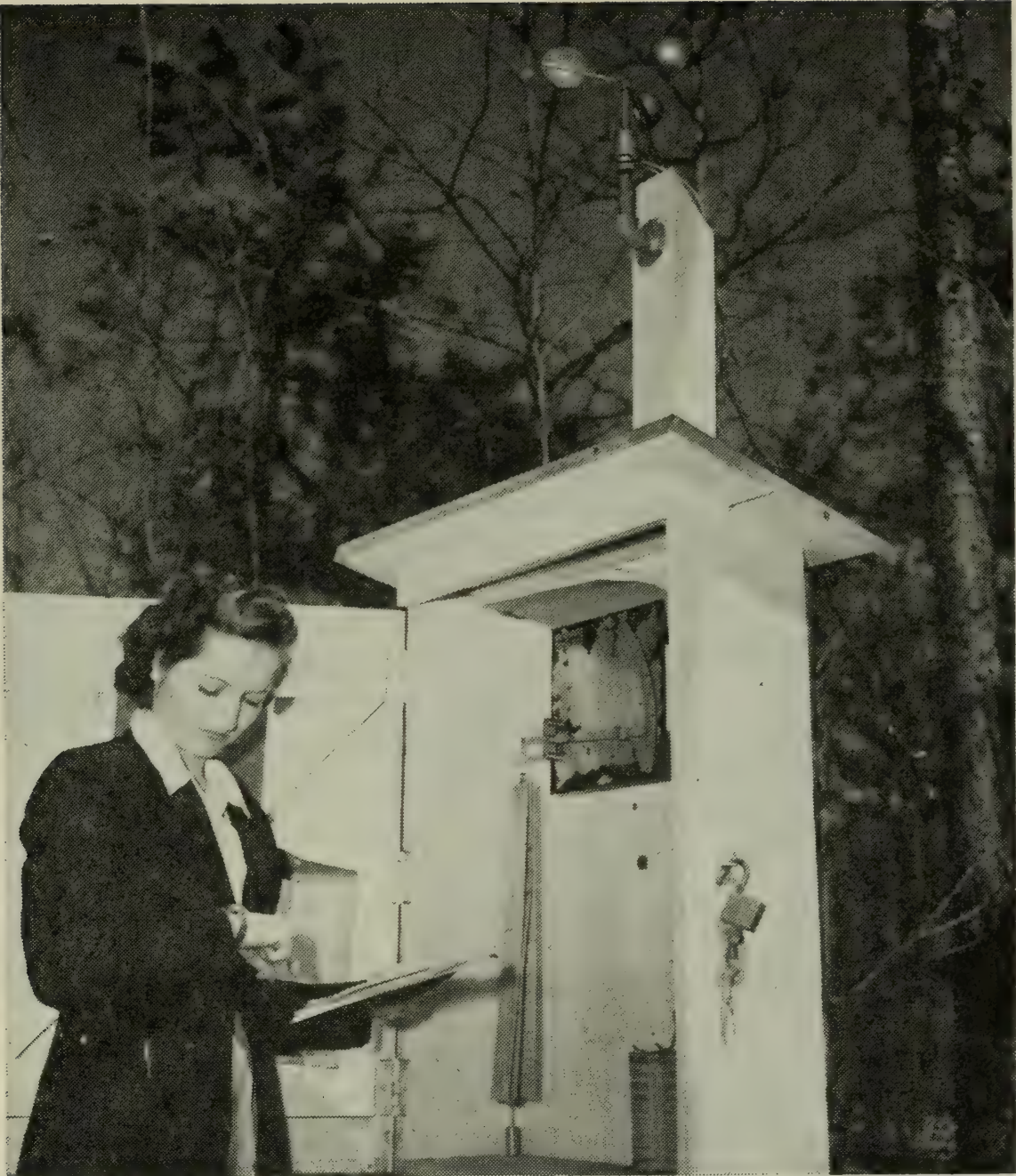
Full use, to the extent of budgeted funds, was made during the past year. By use of two-way radio its was possible to dispatch the one plane available to any fire problem area within the state quickly, at a moment's notice.

The plane was equipped with a more powerful two-way radio than previously used, and communication was possible at all times from the Columbia Office to the plane at any forest area in the State.

The use of this plane proved very efficient in directing both manpower and equipment to large fires, and also in directing suppression activities on the fire line.

Considering the enormous amount of timberland which would have burned otherwise, the cost of operating the aircraft was negligible.





In the early days of fire protection, fire fighters could only guess as to whether or not any day would be a bad fire day. Now, with fire danger measurement instruments, fire weather can be accurately measured.

### **Fire Danger Measurement:**

The Commission's present system of forest fire danger measurement has been in operation in each county of the State for the past six years, and has added materially to the efficiency of all fire control activities. Readings are taken at these stations four (4) times daily, and the burning index (degree of burning) is relayed to all personnel. With this information, members of individual County Unit organizations have first hand knowledge

of the type of fire weather which exists, and plan their work accordingly. Average records for the State indicate the following number of days for each of the five (5) major burning index groups:

0— 1	96 days
2— 5	114 days
6— 17	113 days
20— 45	42 days
50—100	1 day

**ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS**  
(Based on Replacement Value)

<i>Items</i>	<i>Value</i>
133 Lookout Tower Units .....	\$ 1,411,730.00
1177 Miles Truck Trails .....	2,942,503.00
2090 Miles Telephone Lines .....	627,000.00
43 Fire Danger Measurement Stations .....	3,000.00
Radio: 63 Base Station Units	
77 Mobile Units	
1 Handi-Talkie	
22 Paging Receivers .....	105,650.00
<b>TOTAL</b> .....	<b>\$ 5,089,883.00</b>

### EQUIPMENT

Nineteen new trucks were purchased during fiscal year 1951-52 for the Fire Control Branch. These new trucks were replacements for an equal number of old model, worn-out trucks.

Three of the trucks are heavy truck-tractors which carry heavy equipment transport trailers. The balance are Ranger pickups and light equipment transports.

It is considered highly desirable to adopt a policy of trading in fire control trucks more rapidly, as it is believed that it would be more economical in the long run to operate them for not more than three years or 50,000 miles, whichever occurs first.

Two light tractors were purchased during the year.

All equipment is purchased and assigned on the basis of greatest need.



**INVENTORY FIRE TOOLS & EQUIPMENT AND ESTIMATED  
REPLACEMENT VALUE**

**June 30, 1952**

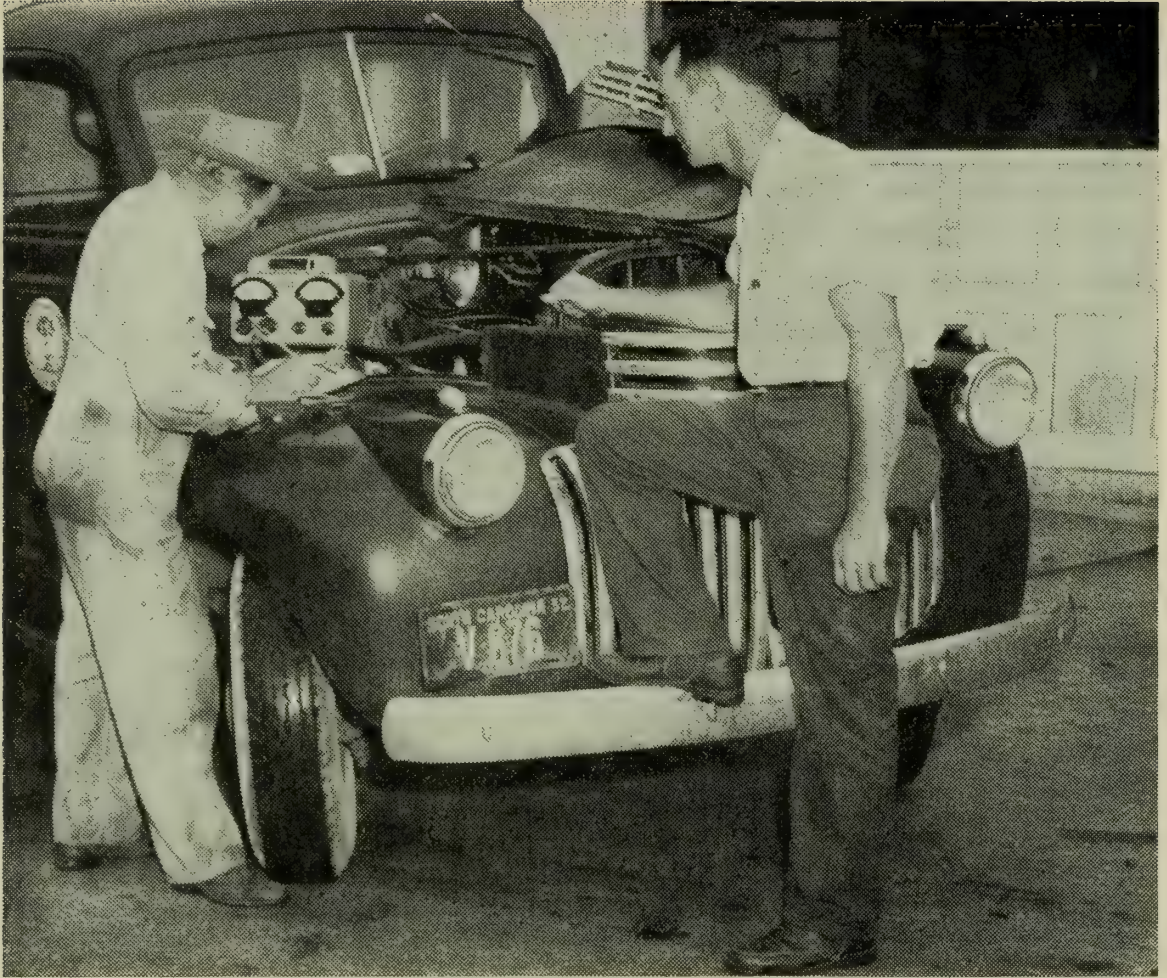
<i>Items</i>	<i>Value</i>
2864 Back Pack Pumps -----	\$ 38,664.00
5867 Fire Rakes -----	13,494.10
2603 Fire Swatters -----	7,548.70
5 Heavy Crawler Tractors -----	32,500.00
1 Medium Crawler Tractor -----	2,490.00
5 Light Crawler Tractors -----	11,500.00
10 Heavy Duty Fire Plows -----	7,800.00
29 Light Tractors w/track System -----	53,650.00
35 Light Fire Suppression Plows -----	7,000.00
3 1/4 Ton Jeeps w/fire Pumps -----	4,800.00
35 Light Equipment Transport Trucks LWB -----	84,000.00
5 Truck Tractors -----	16,800.00
6 28-Ft. Equipment Transport Trailers -----	15,600.00
2 Pickup Trucks -----	2,900.00
47 Ranger 1/2 and 3/4 Ton Trucks -----	79,900.00
5 Sedan Delivery Trucks -----	9,000.00
2 LWB 1 1/2 Ton Trucks -----	4,200.00
<b>TOTAL -----</b>	<b>\$391,846.80</b>

**Equipment Maintenance Shop:**

The central repair shop of the Branch of Forest Fire Control is at Sumter. Operated primarily to handle such specialized repair work as overhaul of fire pumps, tank cleaning and repair, it has been necessary in recent years to expand its activities to include practically all automotive overhaul for economic reasons.

Headquartered at the central shop are three traveling mechanics who make frequent inspections of more than 200 trucks, tractors, trailers and plows located throughout the State. Such repairs as can be handled in the field are done by these men at the time of the inspection. All inspections are based on special maintenance standards furnished by the Engineering Section. Traveling mechanics are on call day or night for emergency calls for repairs to all fire fighting equipment, or as relief operators on large fires. Traveling mechanics made 425 field inspections on motorized equipment, and 771 miscellaneous repair jobs in the field during fiscal year 1951-52.





Each Commission owned vehicle is thoroughly inspected periodically to insure efficient operation.

Some of the jobs handled by the central shop are listed as follows:

Made:

- 47 welded steel rain gauge stands
- 24 adjustable screw links for tractors
- 3 sets tractor crankcase and radiator guards
- 1 set welded steel concrete forms
- 30 sets radio mast brackets
- 2 sets welded steel screen racks
- 1 steel tower cab
- 3 backfiring torches
- 4 equipment transport bodies
- 2 hydraulic lift systems for Crawler Tractors
- 2 truck water tanks

Overhauled & Painted:

- 6 light tractors complete
- 4 heavy duty tractors complete



**Repaired:**

46 light tractors

9 heavy duty tractors

**Miscellaneous:**

Completed 215 repair jobs to trucks and tractors

Received and outfitted 10 new trucks

Equipped 6 Jeeps with tanks and pumps and plows

Cleaned and treated and repainted 24 water tanks

Repairs to 4 heavy trailers

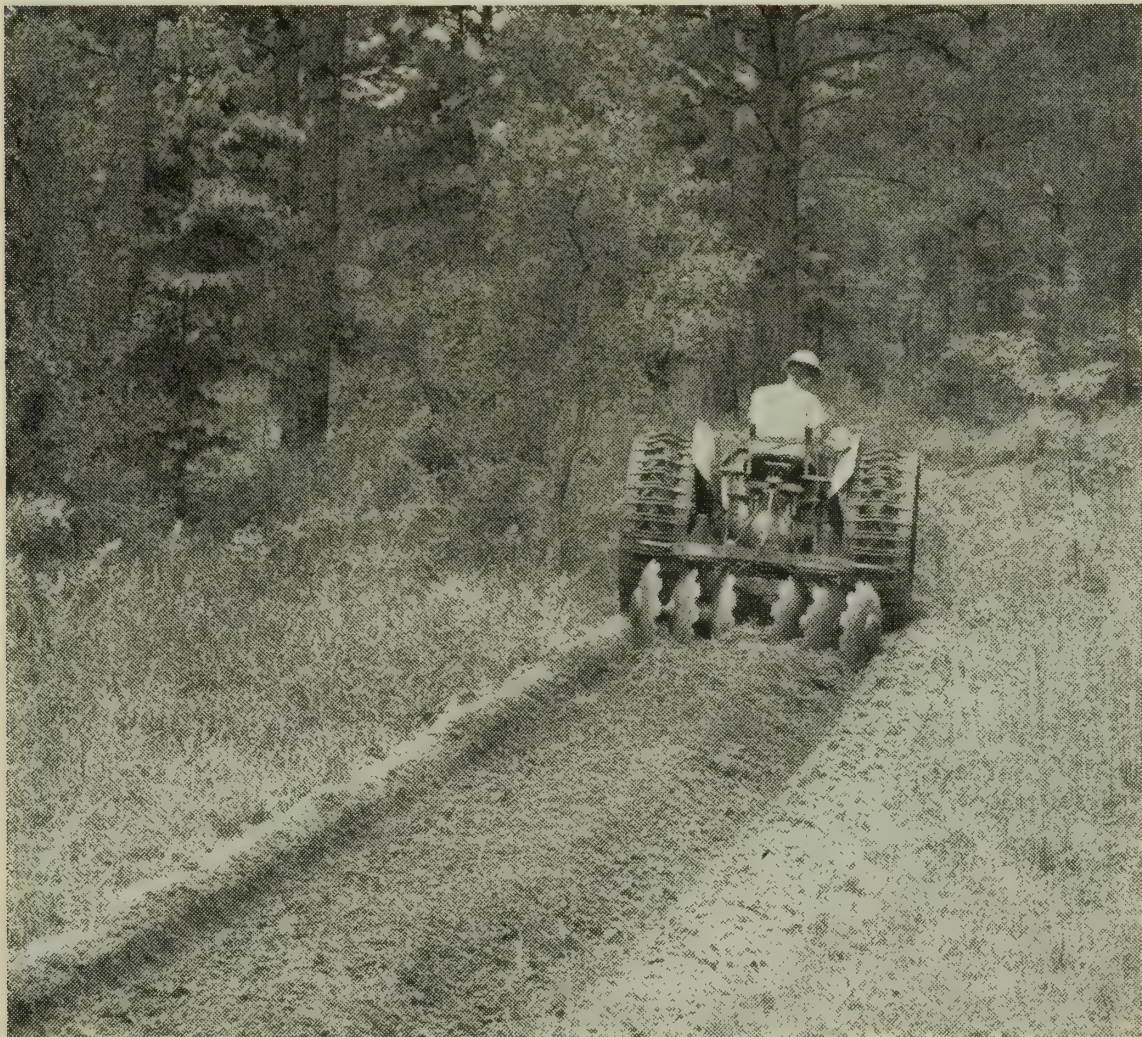
Direct assistance to Districts on 18 fires

Conducted 4 Equipment Maintenance Schools

Conducted 16 Fire Plow Demonstrations for landowners

**Experimental Work:**

Working with plow manufacturers, a new model of South Carolina's C-150 Fire Suppression Plow was developed and



The firebreak maintenance plow is an example of equipment development carried on at the Commission's Sumter Shop.



made available at a reasonable cost to landowners. Also testing was completed on a new model firebreak maintenance plow for light tractors.

### FOREST FIRE SUMMARY

South Carolina experienced a moderate fire season this fiscal year. February 11, 1952, proved to be one of the most disastrous days since the state was organized for State-wide fire protection. Dry weather conditions coupled with extremely high winds caused many thousands of acres to be severely burned, mostly through the Sand Hills belt.

January was the most hazardous month, with moderately heavy fire occurrence extending through February and March. The total rainfall for the month of January was 0.93 inches below normal. With the exception of June, which was 2.40 inches below normal, rainfall for all other months during the last half of the year was above normal. Total state rainfall for the entire year averaged 1.75 inches below normal.

#### Illegal Fires:

During the fiscal year, a total of 4,982 illegal fires burned 108,450.1 acres of forest land in South Carolina. This acreage figure represents 0.96% of all the forest land under protection by the state. The average area burned per fire was 21.8 acres.

This year, January proved to be the worst fire month for fire occurrence when 1,235 fires burned 30,343.1 acres. This represents 24.8% of all the fires which occurred and 30% of the total acreage burned. This condition was due primarily to a sub-normal amount of precipitation which favored fire occurrence. Even though only 923 fires occurred in February, this month was the most disastrous from an acreage burned point of view. Brisk winds caused fires to burn more rapidly, once they started, and also hindered the efforts of fire crews to bring them under control. Accordingly, some 32,776.8 acres of forest land were burned during February. A considerable number of fires also occurred during the months of March and April.

Both highest fire occurrence and greatest acreage burned was experienced in Orangeburg County where 531 fires burned 17,778.8 acres. Horry County was second highest with 387 fires burning 15,311.5 acres. Both of these counties operate under a burning permit law, whereby all fires which are not



covered by a permit, regardless of the desires of the landowner, are considered illegal and recorded accordingly.

The smallest number of fires occurred in Laurens and McCormick Counties, each of which experienced 24 illegal forest fires. Pickens County experienced the smallest acreage loss with 56.9 acres burned. Other counties experiencing low acreage losses were Abbeville with 198.5 acres, Anderson with 275.9 acres, and Union with 243.3 acres. Pickens County had the smallest percent of total forest area burned with 0.03%. Pickens County also had the smallest average area burned per fire with 1.7 acres.

### **Causes of Fires:**

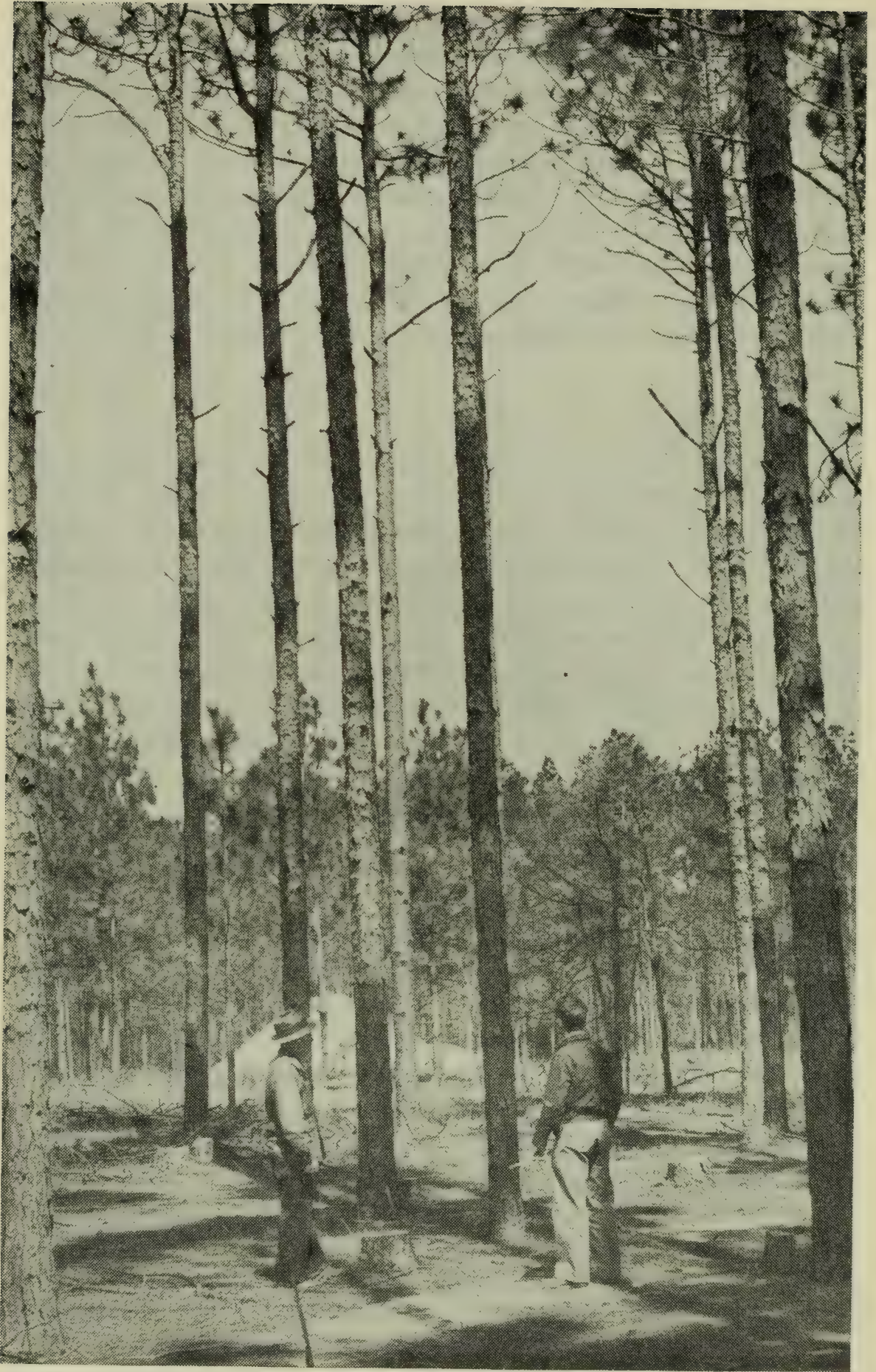
The greatest cause of forest fires which occurred during the year was attributed to incendiarism. A total of 2,063, 41.5% of all fires burning 54,896.2 acres, resulted from this cause. Smokers caused 22.9% or 1,142 fires burning 14,897.8 acres. A total of 973 fires or 19.5% of the total number was caused by debris burning. The balance of the fires was attributed to railroads, campers, lumbering, lightning and miscellaneous causes.

All fire prevention activities are planned to cope with major fire causes. The recently prepared fire prevention plans, now in use in all counties, stress the factors which cause the greatest number of fires in each locality, and emphasize prevention measures accordingly.

### **Legal Fires:**

A considerable number of burnings were conducted by landowners who intentionally burned their woodland areas for some specific reason. In accordance with existing fire laws, no landowner is restricted from burning over his land as long as the fire is not allowed to escape and spread onto the lands of others. A total of 1,553 fires, burning 137,555 acres, were experienced in the State during the fiscal year. 309 fires, burning 24,219 acres, were attributed to landowners desiring to reduce forest fire hazards. Burnings on hunting preserves, to improve shooting conditions, accounted for 333 fires which burned 86,539 acres. 191 fires, burning 2,060 acres, were carried out for the purpose of ridding timber land acres of debris and rubbish. 572 fires, burning 21,375 acres were burned for grazing purposes. Miscellaneous legal fires totalled 148, burning an acreage of 3,362 acres.





Commission foresters help owners of woodland to manage their woodlands and harvest their forest products for maximum production and profit.



## FOREST MANAGEMENT

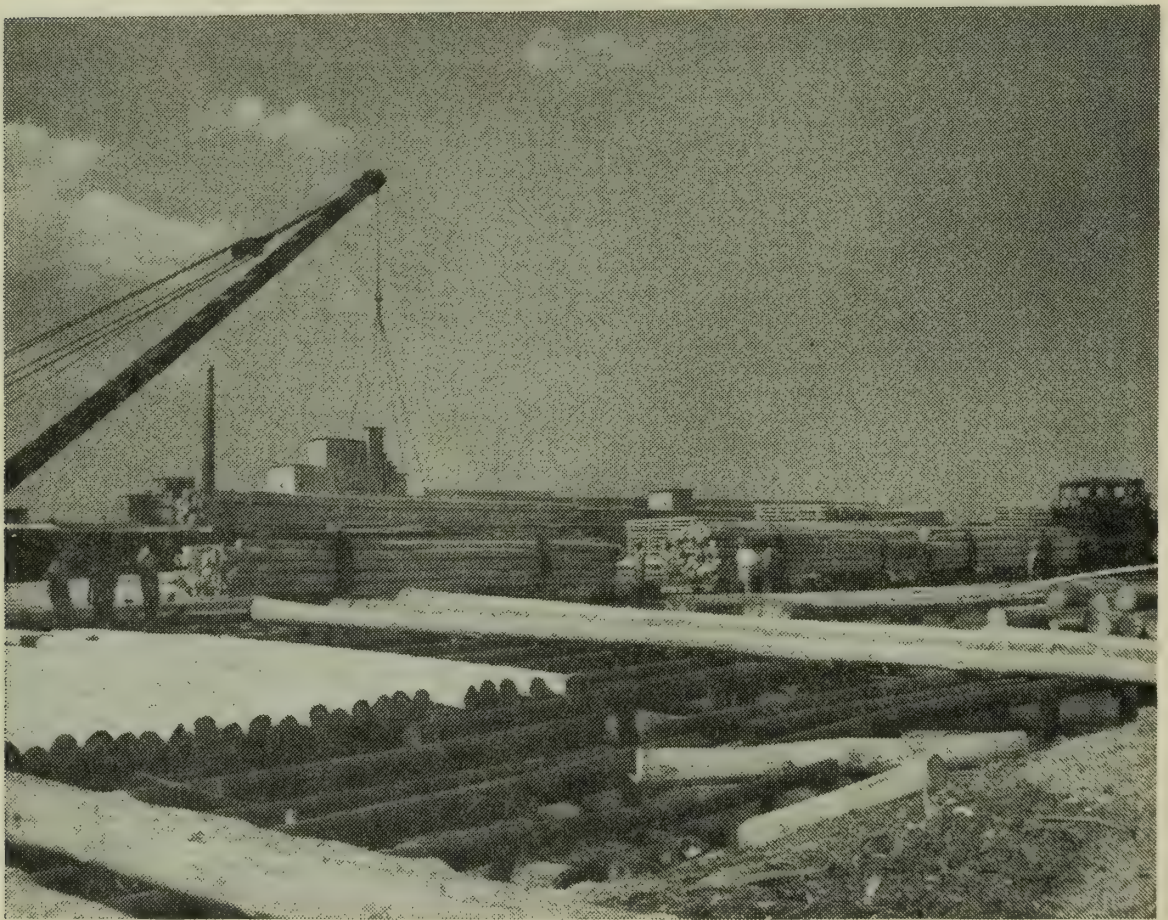
The demand for and production of forest products in South Carolina continued at a high level with some slow-down evident towards the end of the year. With the continued high production there is reason to believe that the sawtimber supply has been overcut again to about the same degree as in the past four or five years. More attention must be given to the proper management of these sawtimber size stands and stands that are approaching small sawtimber size in order to build up the growing stock and make available more quality sawtimber trees. Efforts to increase the amount of our sawtimber size growing stock must be continued if South Carolina woodlands are to support the forest industries that are now operating in the state, and considerably more attention must be given them before South Carolina can encourage new industries that use this sawtimber size material.

### LUMBER AND PULPWOOD PRODUCTION BY YEARS

<i>Year</i>	<i>Lumber</i>	<i>Pulpwood</i>
1942	1,079,351 M bd. ft.	946,000 Cords
1943	984,773 M bd. ft.	985,000 Cords
1944	850,748 M bd. ft.	1,053,500 Cords
1945	723,667 M bd. ft.	877,500 Cords
1946	1,005,700 M bd. ft.	955,700 Cords
1947	871,014 M bd. ft.	948,388 Cords
1948	798,700 M bd. ft.	1,108,523 Cords
1949	1,002,000 M bd. ft. est.	1,012,180 Cords
1950	997,000 M bd. ft. est.	1,182,413 Cords
1951	1,000,000 M bd. ft. est.	1,251,045 Cords
1952	1,000,000 M bd. ft. est.	1,260,000 Cords est.

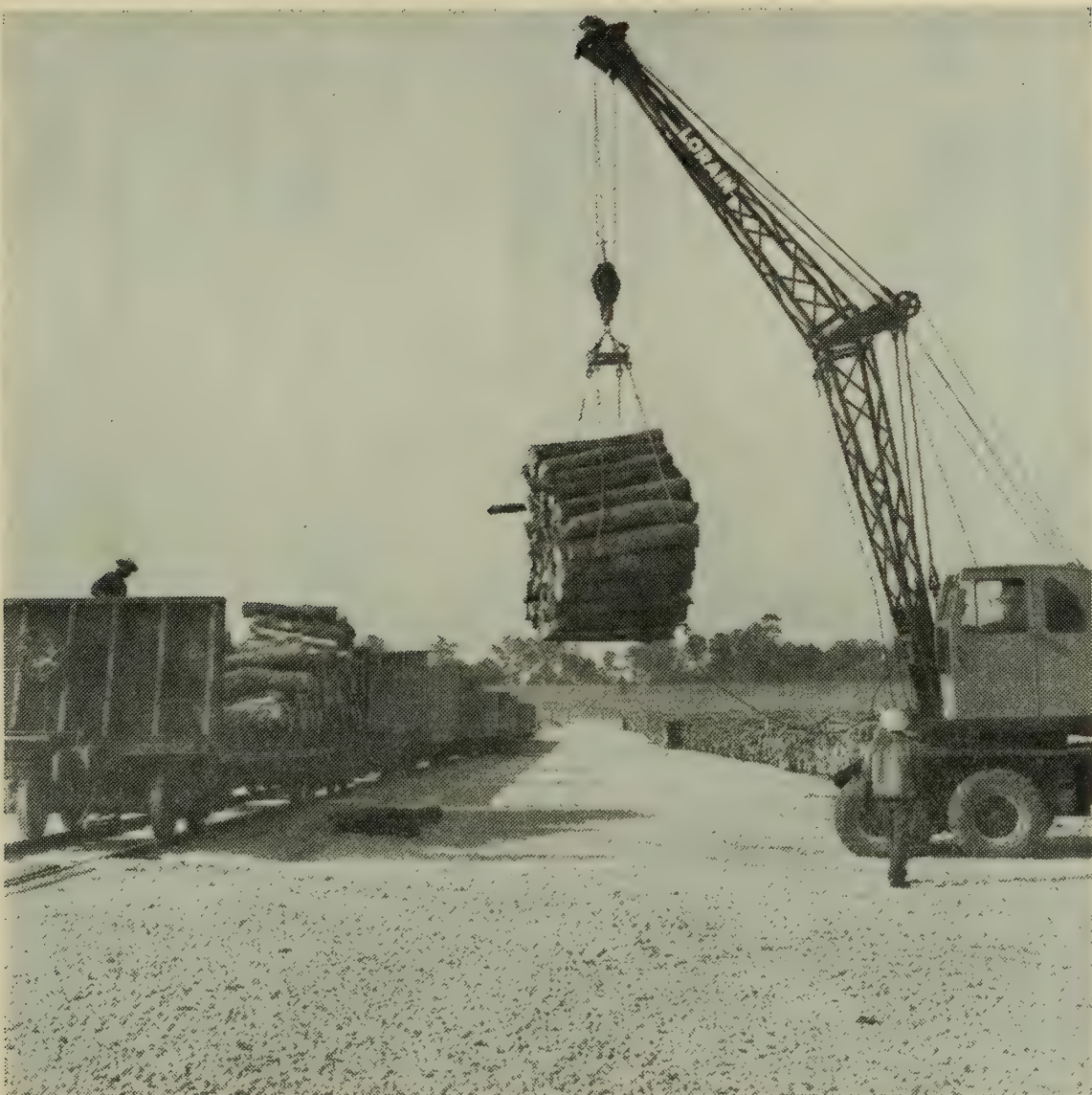
There were few new forest products industries that began operating in South Carolina during the past year. In fact, toward the end of the fiscal year a number of the small sawmill operators ceased operation. This was partly due to seasonal work; however, some of them dropped out because of the high competition for stumpage and the slight decrease in demand for some low grade forest products.





Lumber and pole production are two phases of the state's forest products industry—the state's second largest industry.





A number of woodyards have been established by pulp and paper companies. These facilities make it more convenient for farmers and other owners of forest land to cut, haul, and sell small amounts of pulpwood during periods of slack employment on the farm.

Forest industries that possess their own land in the state continued to show considerable interest in stand improvement work, improved cutting practices, planting of abandoned acres, waste reduction and fire protection. A few of the larger companies who had not previously hired foresters did so and one or two others have indicated a desire to employ a full time forester. Industries other than the forest products type also employed foresters either on part-time or consulting basis to help set up proper management techniques on their own land. Apparently a majority of the companies in the state that own sizable acreages are making some effort to bring these lands under forest management.





Selective harvesting of forest products yields maximum returns from the sale of various products, and leaves woodlands in a healthy growing condition for continuous production.



The Conservation Departments of the larger pulp companies continued to mark pulpwood for thinning on private property. We do not have any reports on the exact amount marked by these men; however, incomplete reports and past records indicate that more than one third of the pulpwood cut from other than company property came from thinnings and tops, one third from seed tree cutting and less than one third from clear cuttings.

Forest management activities of the State Commission of Forestry conducted to improve the forestry situation and to benefit all of the people of the state are explained in detail on the following pages.

### MANAGEMENT ASSISTANCE

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing technically trained foresters to help landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection and reforestation measures needed.

In cases where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a sample timber sale agreement. The charge for this service is fifty cents per thousand board feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

During the year Commission foresters made 919 woodland examinations on 170,948 acres of forest land, and selectively marked a total of 18,031,822 board feet and 3,088.6 cords for 288 landowners on 11,931 acres of forest land. The following table shows the continuous increase in woodland examination and selective marking assistance that has been rendered since 1941-42.





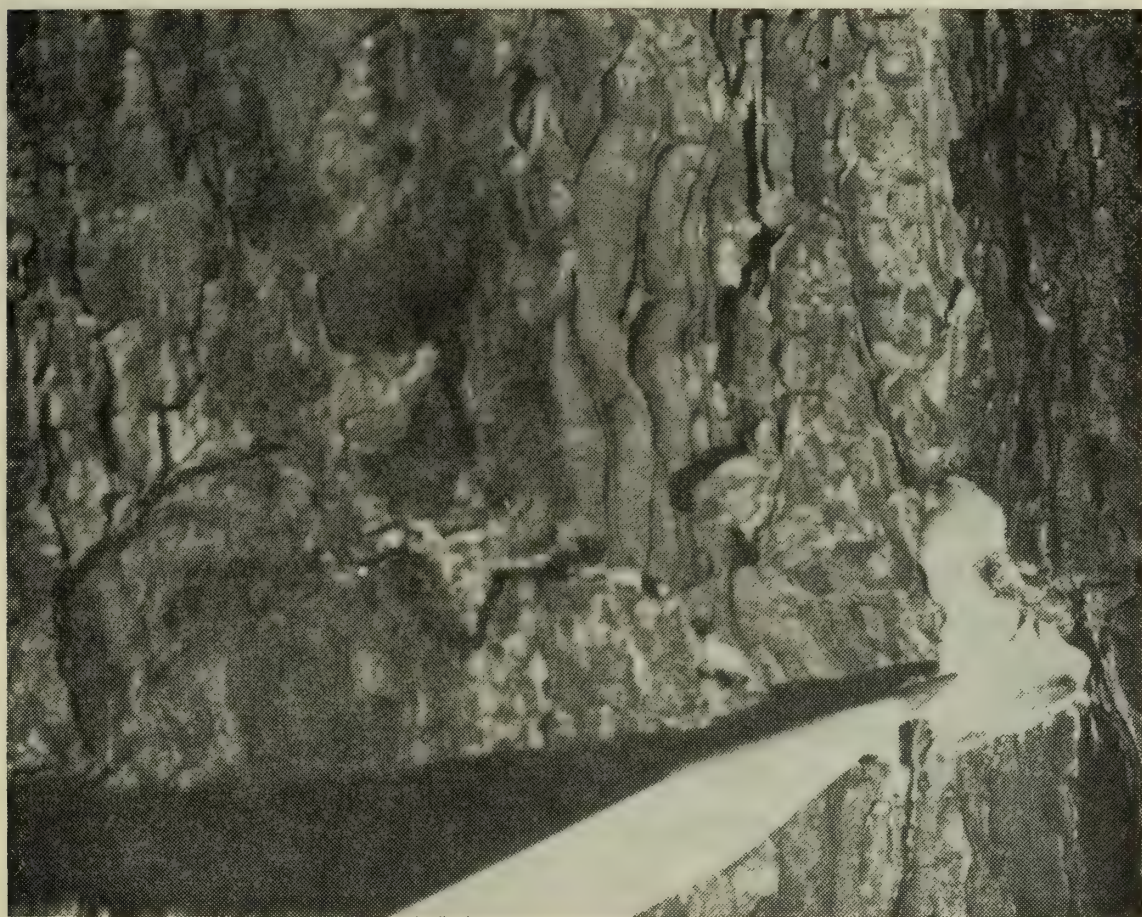
Timber is a crop—and more and more landowners are discovering that when properly handled forests can produce repeated crops of forest products.

SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
1950-51 .....	998	173,057	339	14,275	19,634,153	3,896
1951-52 .....	919	170,948	288	11,931	18,031,822	3,088.6
TOTALS .....	5,586	1,315,628	1,965	147,204	196,446,735	25,814.2



It is estimated that during the year industrial and private consulting foresters marked an additional 250,000 cords of pulpwood and 40,000,000 board feet of sawtimber on 40,000 acres of private forest land. Commission foresters referred 98 jobs to private foresters during the year. These consisted of the larger tracts examined by our men. In addition, a large number of jobs were referred to consultants by telephone and letters where Forestry Commission personnel did not actually examine the property.



Each year Commission foresters examine insect damage and diseases attacks and advise landowners or measures to take to control these enemies of the forest.

A Forest Management Training School for all technical personnel of the Commission of Forestry was held at the Burnt Gin Group Camp in late May, with special training emphasis placed on management of bottomland hardwoods and a study of soil capabilities. These schools are held each year to help keep our men abreast of current and improved forestry techniques and to provide the men with an opportunity to get to know each other and talk over mutual problems.





Crop rotation is practiced at the Horace L. Tilghman Forest Tree Nursery to keep the land in good condition to produce millions of trees each year which are planted by South Carolina landowners.

## REFORESTATION

A total of 16,619,300 seedlings were distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly	9,326,100
Slash	6,449,600
*Longleaf	738,800
Redwood	300
Arizona Cypress	104,500
	<hr/>
	* 16,619,300

\* Includes 3,000 trees shipped to other states for experimental purposes.

An exchange was made with North Carolina, delivering 27,000 slash pine trees for 27,000 poplar seedlings, because a number of planters in the state particularly wanted poplar seedlings for planting on bottomland sites.

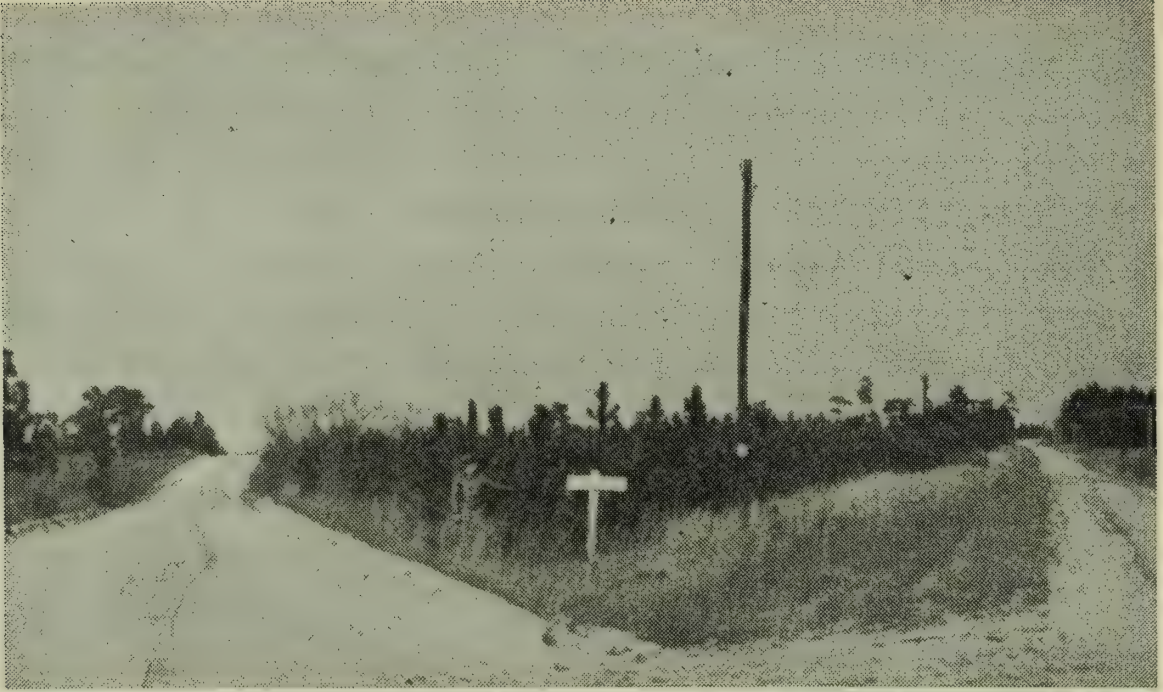
Production of trees this year was some 12,000,000 short of that planned. Two reasons contributed to this loss of production. A forty-three day drought during May and June was the direct cause of loss. In addition, because the Nursery soil



did not have sufficient organic content, its water holding capacity was greatly reduced, which correspondingly increased the effects of the drought. In spite of operating the water pumps at full capacity for 23 hours each day, sufficient water could not be supplied to avoid losing some of the trees.

The General Assembly again made it possible for any landowner in the state to receive up to 3,000 seedlings free of charge at the nursery or for 50c per thousand delivered to the nearest express office. 5,575,850 seedlings were distributed free under the provisions of this act. Tables 12 and 13 in the Appendix show a record of seedling distribution by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years:

Year	Seedlings Planted
1928-29	142,000
1929-30	148,000
1930-31	986,000
1931-32	976,000
1932-33	996,000
1933-34	1,031,000
1934-35	7,529,000
1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600
1947-48	11,356,990
1948-49	30,338,775
1949-50	29,501,955
1950-51	20,615,315
1951-52	16,619,000
<b>TOTAL</b>	<b>251,666,808</b>



Planted trees grow rapidly. These pictures show the result of 10 years growth of pines planted on poor soil.



South Carolina has one of the best nurseries in the nation. Through over-production on some of the area the land has lost a good deal of organic matter; however, steps are being taken to correct this and within a year or two all of the land should be back in good productive condition.

This is the fifth year of nursery operations at the Wedgefield nursery. During these five years the nursery has produced and distributed 114,929,035 seedlings for an overall cost to the Forestry Commission of \$336,313.17 including all capital investment expenditures. Based on these five years of operations the average cost per thousand seedlings is \$2.93. The average annual distribution was 22,985,800 seedlings for each of these five years.



Each year some 12,000 bushels of pine cones are collected to obtain seeds for growing pine seedlings at the Commission's forest tree nursery.

### CONE COLLECTION

The cone crop for the fall of 1951 was good in the Newberry area but was fair to poor elsewhere in the state. The slash pine crop in the Hampton-Allendale section was fair. District personnel were able to secure 10,291½ bushels of pine cones (6,429 bushels loblolly, 741½ bushels longleaf, 3,669 bushels slash, 2 bushels spruce). From these cones 7,942 pounds of seeds were extracted.

In addition, 41 pounds of red cedar were collected and 20 pounds were purchased. Also, one pound of red wood seed was purchased.

At the end of the year there were 550 pounds of slash, 2,284 pounds of loblolly, and 392 pounds of longleaf, and 41 pounds of red cedar seed in storage for use next year. The number of pounds of seed carried over this year is far below the normal carry-over. Additional seed must be collected or purchased this year to avoid curtailing the nursery program.

### FOREST SURVEY

The latest information on the condition of South Carolina's forest resources was compiled by the state and the U. S. Forest Service during 1947. There is no reason to believe that the trend indicated in this 1947 survey has changed. South Carolina is still being overcut for sawtimber sized trees and in some areas overcut for the pulpwood sized trees.

Requests were received during the year from industries wanting to locate in South Carolina seeking information as to where they might obtain the necessary raw materials. In many instances we were unable to suggest a suitable location due to the depletion of the growing stock. Some of the established industries, however, are beginning to use more of the hardwood species which previously were considered culls. The large pulp industries are in some cases converting their plants so that more hardwood can be used.

Consideration is being given to making a new survey within the next year or two. It is necessary that we have currently accurate information on the condition of the forest resources in the state in order to answer questions on industry location and to formulate plans for increasing forest management activities.

A timber resource study will probably be made by the U. S. Forest Service within the next few months which should supply some needed information on utilization trends in South Carolina.

To improve the present forest conditions in the state it is necessary to establish more complete fire protection, continue or increase the present rate of planting, establish more improved cutting practices on private timber holdings, and reach more people through educational activities.



## COOPERATIVE FOREST MANAGEMENT

During the fiscal year eight cooperative forest management projects were operated in the state. A summary of work accomplished by C. F. M. Foresters is included with the data for each district.

### STATE FORESTS

The amount of state forest land remained the same as last year. The state forests and acreages are listed below:

1. Cassatt State Forest .....	462 acres
2. Harbison State Forest .....	2,202 acres
3. Manchester State Forest .....	28,830 acres
4. Sand Hills State Forest .....	92,000 acres

<b>TOTAL</b> .....	<b>123,494 acres</b>
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Firebreaks plowed on state forest lands help protect the trees from fire. They also serve to demonstrate to landowners a measure anyone can take to protect their woodlands from fire.



Prior to acquisition by the state most of the land included in the state forests had been heavily cut over and generally mis-used. The primary effort since acquisition by the state has been directed towards building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective is the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops in order to reduce the competition so that pine will survive and grow.

Detailed reports of activities on each of the State Forests follow:

### **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres composed largely of scrub oak and open fields. The open fields have been rented in the past for watermelon production. No planting was done on the forest and only one fire occurred which burned 15 acres. Personnel from the Sand Hills State Forest maintained boundary firebreaks. Planting of the open fields to slash pine will be done on this forest during the next two years.

### **HARBISON STATE FOREST**

Harbison State Forest, containing 2,202 acres, is located in Richland County. During the year 414.32 cords of pulpwood were marked and sold. The receipts from these sales, \$1,861.92, were returned to the General Fund since the entire purchase price of this forest was paid from timber sales made last year.

The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the Caretaker, Mr. Roof Lowman. One fire occurred on the forest during the year which burned 63 acres. Approximately seven miles of firebreaks were maintained by Manchester State Forest personnel and equipment.

### **MANCHESTER STATE FOREST**

The 28,838 acres of land making up Manchester State Forest is located south of Wedgefield in Sumter County. This land is leased to the S. C. State Commission of Forestry on a long term lease from the Federal Government.





Protected from fire, many areas on state forest lands are re seeding naturally.

More than one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak and reclaiming it for pine production.

#### **Management Plan:**

A management plan and stand description was made for this forest in 1946-1947. This plan was used as a guide in setting up what stands were to be cut, those needing silvicultural treatment, etc. It is necessary now that these stands be reclassified and a new map made so that the young stands approaching the size for a pulpwood thinning can be checked and scheduled for thinning as necessary. This reclassification has been started.

#### **Tree Planting:**

A total of 143,100 seedlings were planted on the forest during the year.



All of these trees were planted by machine. Both the Lowther machine and a machine made by Theodore Hunter, Sand Hills State Forest Mechanic, were used in the planting.

#### **Forest Products Sold:**

Forest products sold during the year included the following:

Sawtimber (bd. ft.) .....	844,731
Pulpwood (cords) .....	315.19
Posts (pieces) .....	1,400

All sawtimber and pulpwood were selectively marked prior to cutting except for some scattered trees in the area to be cleared of scrub oak. All sales were advertised and sold to the highest bidder.

In addition to the above, fuelwood was harvested for use of the personnel on the forest and fuelwood permits were given to residents in and near the forest. Fuelwood cutting was confined to undesirable trees and dead trees.

#### **Fire Protection:**

Only seven fires occurred which burned 17.1 acres during the year. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining the area in the prevention, pre-suppression and suppression of forest fires. A meeting of the personnel of these organizations was held at Manchester State Forest to discuss the plan.

Approximately 250 miles of firebreaks were maintained and 28 miles of new firebreaks were constructed. Approximately 3 miles of these firebreaks were burned along the right-of-way of the Atlantic Coast Line and Southern Railroads.

#### **Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. A detailed report on these two camps will be found in the Parks Division section of this report.



### **Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

### **Agriculture:**

Forty-five tenants rented 1,441 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In June, 1952, Soil Conservation Service leased approximately 2,000 acres of fields on the forest to use for growing legumes and grass seeds for both commercial seed production and experimental purposes. In order to provide the land for the S. C. S. it was necessary that some farm leases be cancelled. These cancelled leases were primarily with those persons who did not live on the forest.

### **Roads and Truck Trails:**

During the year 32½ miles of truck trails were machined and washes filled, three bridges repaired and a number of diversion ditches cleaned.

### **Telephone Lines:**

Eleven miles of telephone lines in the forest system were brushed and six poles were reset during the year. A number of breaks were repaired and general maintenance carried out to keep the telephone system in good working order.

To supplement telephone communication system a mobile radio unit was installed in the Director's pickup truck. This enables working crews to maintain constant contact with the towers and allows for direct contact with fire suppression forces.

### **Silvicultural Practices:**

The primary silvicultural activity was the reclaiming of scrub oak areas. 182 acres in Compartment 5 were cleared of scrub

oak and plowed with the Athens disc plow. Following the plowing the land was allowed to settle, then planted to pine seedlings. Results from this treatment appear to be satisfactory and economically sound. A more detailed description of this work can be found in the annual report submitted by Manchester State Forest Director.

196 acres of slash pine plantation were prescribed burned for hazard reduction, and 226 acres were burned in conjunction with the clearing of scrub oak lands. Results were good with little apparent damage to the pine stands.

Some experiments were initiated in an effort to determine how longleaf pine may best be planted. The following plots were established.

Plot No. 1 500 longleaf—Clipped tops—waxed roots—hand planted

Plot No. 2 500 longleaf—Clipped tops—hand planted

Plot No. 3 500 longleaf—Untreated

Plot No. 4 500 slash—Overgrown stock—machine planted

Plot No 5 Arizona Cypress—Untreated

The initial survival was excellent to date. It is too early to determine any definite contrasting results.

Data on other experiments already underway were recorded. These consisted of thinning experiments in young pine stands, poisoning of undesirable hardwoods, prescribed burning, and other planting experiments.

### **Maintenance and Repair:**

All buildings at the Forest Foreman's residence were repainted, the barn at Forest Headquarters was reroofed and a large number of smaller repair jobs done. Major repairs were made on five tenant dwellings and minor repairs at four others. Many of the tenant dwellings are in a bad state of repair. The Forest Headquarters buildings and Foreman's residence are in good repair.

One pickup truck was traded and all other automotive and tractor equipment required considerable repair work to keep them operating. There is a definite need for a new 40-60 horsepower tractor and one new 2-ton truck. The tractor is needed to continue the scrub oak clearing. The present equipment requires far too much maintenance expenditure.



### **SHAW AIR FORCE BASE LEASE**

The U. S. Army Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run 10 years. The State Forestry Commission will be paid \$3,074 per year for this lease.

### **SAND HILLS STATE FOREST**

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of the area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease agreement.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. More than half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultural objective at present.

#### **Tree Planting:**

During the year only 28,300 longleaf pine seedlings were planted on the forest by planting machines. Of this number 11,700 longleaf pine seedlings were produced in a nursery bed located on the forest. This was done to establish experimental plots to compare locally grown seedlings with seedlings grown at the Wedgefield Nursery. Several plots were established using seedlings grown from seed collected from several localities in the state. This is being done in an effort to determine what effect, if any, seed source has on the growth and survival of longleaf pine.

#### **Forest Products Harvested:**

The following products were harvested from the Sand Hills State Forest during the year:

Sawtimber	331,038 bd. ft.
Pulpwood	289.01 cords

### Fire Protection:

During the year 27 fires burned 4,425.5 acres. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield Unit Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

Of the total area burned by fires, 3,816 acres were burned by one fire during April. Plans are being made to salvage the pulpwood and sawtimber killed by this severe fire.

A total of 205.4 miles of firebreaks were plowed on the forest.

### Recreation:

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees are also held here. The lake is open to fishing but no swimming is allowed.

The Parks Division continued improvement work on Campbell's Pond, Negro State Park. This area received heavy use during the year. A more detailed report will be found in the Parks Section of this report.

### Fish and Wildlife:

No hunting was allowed on the area during the year. However, plans call for the establishment of areas for game preserves on which no hunting will be permitted, while most of the area in the future, however, will be open to public hunting.

Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond



is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

### **Agricultural Lands:**

20 tenants rent and farm 1,250 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

### **Roads and Truck Trails:**

During the year 94 miles of truck trails were graded, brushed out, and washes were filled in. 20 wooden culverts were cleaned out. Eight timber bridges were repaired by replacing rotten deckings. 60 diversion ditches were cleaned out.

### **Telephone Lines:**

Maintenance of all telephone lines is handled by the Chesterfield Unit Fire Control Organization, but during the year forest personnel assisted the county forces in repairing interruptions of service on the line.

### **Silvicultural Practices:**

The 206 acres in eight separate areas which had been previously cleared by the brush cutter were reworked in an effort to obtain a catch of longleaf pine seedlings. It is too early to determine the results.

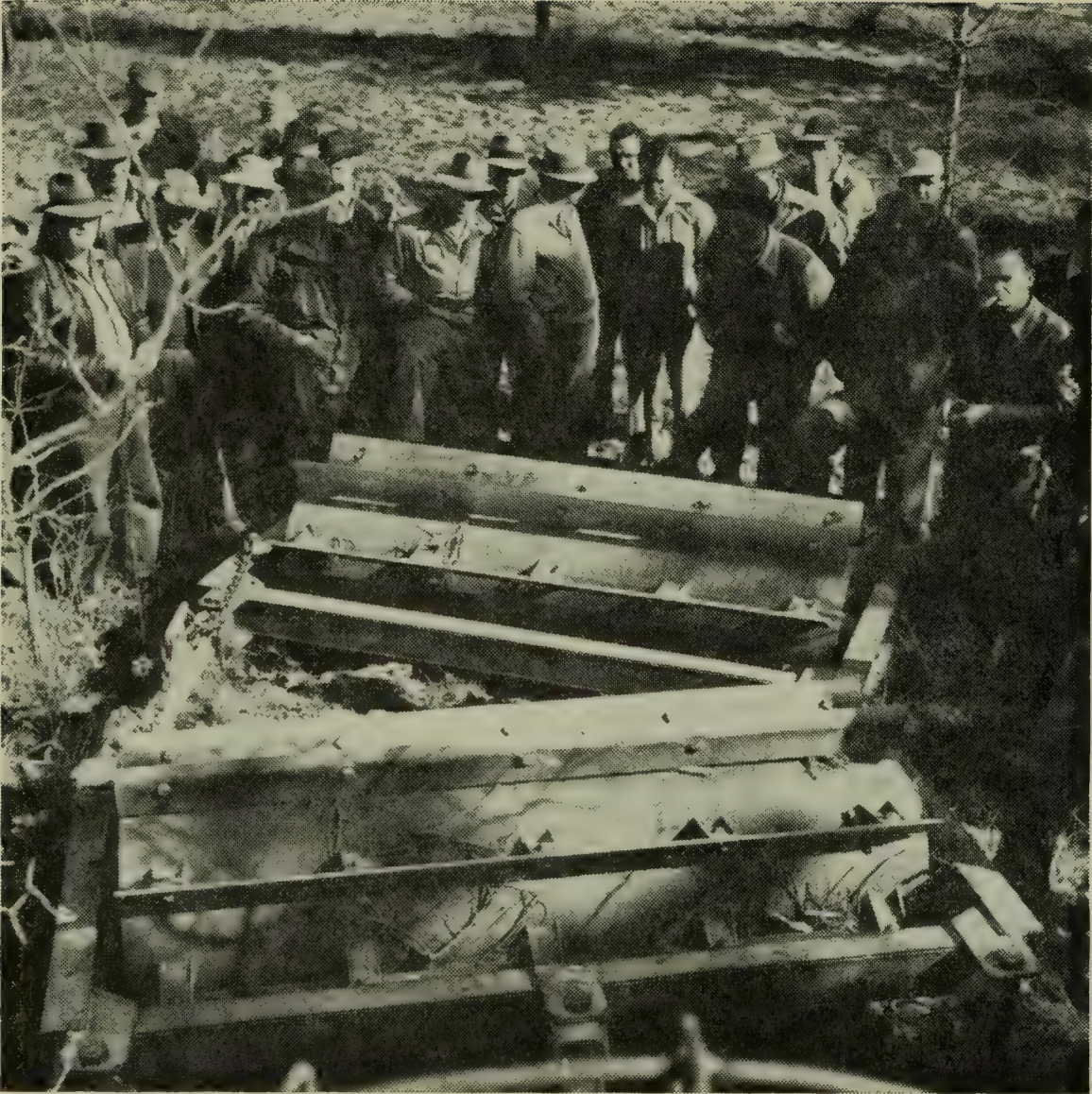
A total of 11,700 longleaf pine seedlings were grown in the seed bed which was established in 1950-51. These seedlings were grown from seed collected on the Forest.

Thirteen acres of a 1937 slash pine plantation were prescribed burned for the purpose of hazard reduction. The burning was very successful.

One plot of 23 acres near headquarters was sprayed with an Ammate solution for the control of scrub oak sprouts. Results are very good.

A 160-acre area of scrub oak land was being prepared for planting. However, this work was discontinued and the area rented to watermelon planters as not enough pine seedlings were available to plant the area. This 160-acre clearing will be





Many people have visited the state forests to observe a brush cutter in operation. Various methods of controlling inferior species and establishing better species are being demonstrated on the state forests.

planted to pine 1952-53. Work has been started on clearing an additional 120 acres of scrub oak land which will be planted.

#### **Maintenance and Repair:**

The Sugar Loaf Mountain Recreation Area was maintained during the year by the forest personnel. The entrance road has been machined several times, washes filled, ditches cleaned out and the edges brushed back. Rotten deck planks were replaced in the big bridge at the lake. At regular intervals during the year the picnic area was cleaned out and tables and benches repaired. Directional signs were repaired and repainted.



A new equipment shed 18' x 40' was constructed and is to be used for storing tractors, plows, planters, and other equipment to keep them out of the weather when not in use. All lumber used and the galvanized iron roof were salvaged from old buildings torn down on the forest.

All cracked or decayed weatherboards and window casings were replaced and two coats of paint were applied to all buildings at Forest Headquarters, Director's residence, and Foreman's residence. Miscellaneous repairs were made on seven tenant houses which included roof repair, screen doors, windows and installing new parts for pumps.

#### **Boundary Surveying:**

A Cadastral Engineer sent by the Atlanta Office to continue work on boundary surveys for the forest has surveyed a number of miles of boundary lines; however, there are many more miles yet to be run to completely establish our boundaries. This surveying was concentrated on areas where there was some dispute about the location of the Sand Hills State Forest lines.





All attendance records fell during the year as more than  $3\frac{1}{3}$  million people visited South Carolina's State Parks.



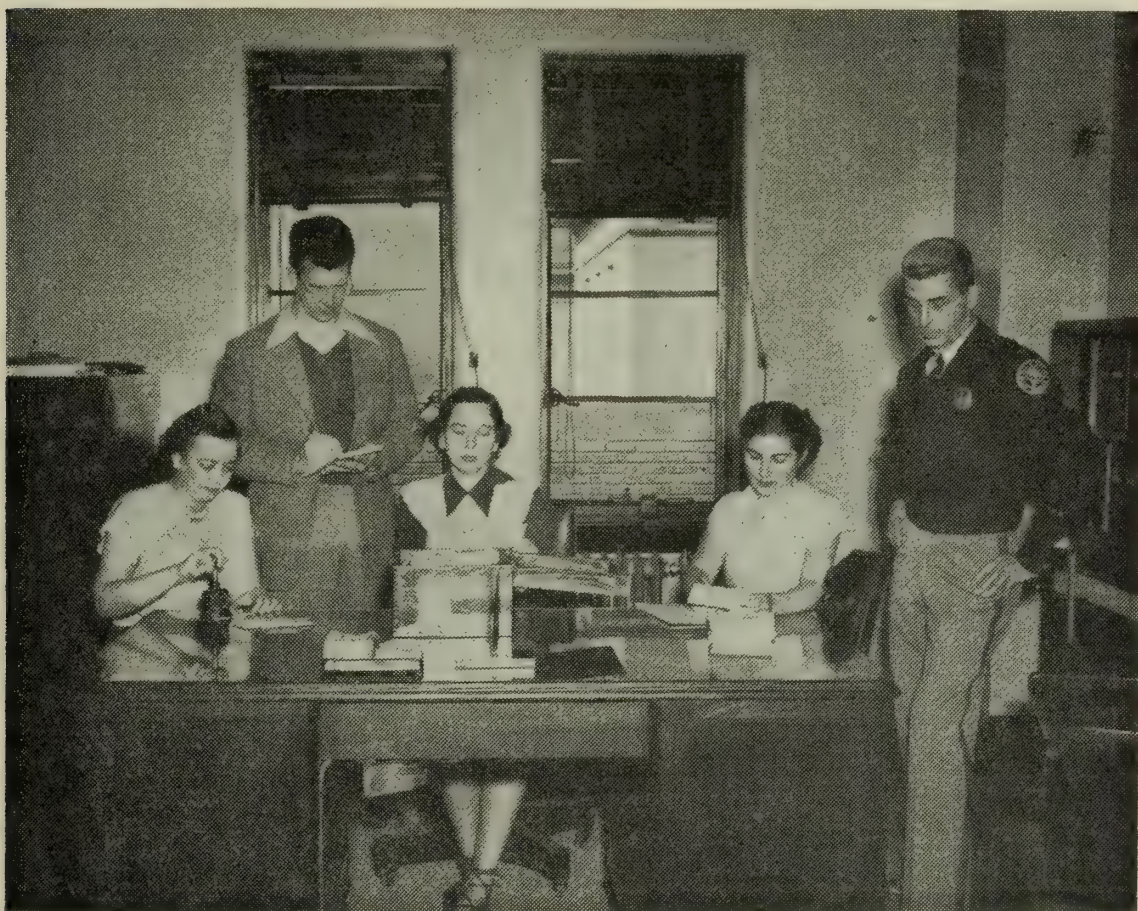
## STATE PARKS

Of outstanding significance in this year's report of State Park operations is the fact that attendances at 21 parks have now reached the unprecedented total of over 3-million visitors.

By careful estimates and traffic counting machine figures 3,378,091 individuals attended the state recreational areas.

In the planning days for South Carolina's system of State Parks, the more ambitious estimates figured approximately a million users. South Carolina has grown beyond expectation; industry and armed forces have brought thousands of unanticipated newcomers; and good roads, automobiles and travel money, have made every area of the state accessible to its citizens. For these and other reasons, one of which we like to believe is that they enjoy State Parks, our people are visiting these regions again and again.

This is only the first phase of the State Park story. For over 3-million people to visit and enjoy the facilities of this State



A public drawing is held after March 1 each year to make assignments of the family vacation cabins at the state parks. Each year more than 1,000 South Carolina families apply for use of these cabins during the summer months, but only 750 families can be accommodated.



agency is one thing; for over 3-million users to crowd facilities designed for less than one-third their number, gives us cause for serious concern.

These 3-million park users are experiencing difficulty in finding parking space—for there are three automobiles instead of the expected one; picnic tables are grabbed up early in the morning and many a picnic lunch is spread in any available opening; toilets and sewerage systems are overtaxed and are constantly breaking down; swimming areas are so crowded as to cause undue tension on lifeguards, threaten the sanitation of the water, and interfere with enjoyable bathing; group camps are full to capacity throughout the summer and family cabins are in such demand as to disappoint every other applicant for a vacation in the park. Park manpower is likewise overtaxed by the heavy use. Continuous long hours of work and duty make an unreasonable demand on park superintendents and other park personnel. The end result is some disappointments to our park users, which is even more disappointing to us.

The solution is readily apparent: (1) restrict the use of the State Parks to the number that may reasonably enjoy these



Many groups, like these school teachers, use state park facilities each year.



areas; (2) grant sufficient appropriations to properly maintain, expand, and operate existing facilities.

We have urged people too long to "visit and enjoy our State Parks" to now turn them away. Our only logical choice is to keep in good repair our existing facilities—buildings, machines, and utilities; to expand certain of these facilities by capital improvements; and to increase the number of personnel in certain of our State Parks. Our budget as submitted for the new fiscal year outlines these needs.

### **Appropriations:**

The total appropriation for State Parks for the Fiscal Year 1951-52 covered by this report was \$292,300 for operations and \$82,500 for capital improvements, or a total of \$374,800.

The operations fund of \$292,300 was the one of chief concern because from this item must come all costs of salaries, operations, maintenance and replacement of equipment, and repairs of equipment and buildings. Our needed appropriation was \$350,000 for operations and maintenance, consequently, we operated another year without funds to do needed repairs and replacements. Our deferred maintenance continues to mount and our repair bill increases.

Before leaving this phase of the report, a comparison of our costs against national averages is interesting. If we figure 3 1/3 million visitors and an operational appropriation of \$292,000, we have a gross cost of less than 10 cents per park user. The net cost is even less, and the national average is 19 cents, gross.

This is no record to be proud of—our people should have improved facilities and adequate accommodations. After all three million visitors seek enjoyment in the State Parks of South Carolina.

Even with insufficient funds a most creditable job was done by the Park Superintendents and their assistants, along with the traveling maintenance crews, in having the parks ready for the heavy summer use.

Consequently, the public began crowding the parks in early spring not too mindful of the things that had to be left undone.

The capital improvements appropriations were ear-marked for specific parks and there follows a report of construction of these permanent developments.





The group camps in the state parks are used by both adult and children's groups

### Two New Parks:

This year saw the beginning of development of two new State Parks—Little Pee Dee, on the Little Pee Dee River, near the Dillon-Marion County line, and Pleasant Ridge for Negroes in the mountains of Greenville County.

At Little Pee Dee in addition to a Superintendent's residence, a dam was built to create a swimming and boating lake, but water will not be impounded until after the lake bottom is cleared. A large picnic shelter, tables and outdoor grills have been provided. Toilet facilities have been provided and a good access road serves the park.

A caretaker's residence was built at Pleasant Ridge and a picnic area begun. A dam has been completed to create a mountain lake, but bathhouse and toilet facilities are not yet provided for the swimming area.

In the absence of any appropriation for the coming fiscal year, it will be another 12 months before the facilities at these two new parks can be extended.



The twenty-one State Parks, with their acreage, location, date established or acquired, and date opened to visitors, are shown below:

Park Name	Acreage	Location-County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	867	Aiken .....	July 1934	Aug. 1936
Barnwell .....	252	Barnwell .....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield .....	March 1934	July 1939
Chester .....	523	Chester .....	May 1935	July 1939
Croft .....	7,135	Spartanburg .....	May 1949	June 1949
Edisto .....	1,255	Charleston .....	Feb. 1935	June 1937
Givhans Ferry .....	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood .....	1,114	Greenwood .....	April 1938	July 1940
Hunting Island .....	5,000	Beaufort .....	July 1938	June 1941
Kings Mountain .....	6,141	York-Cherokee .....	Nov. 1934	June 1940
Lee .....	2,839	Lee .....	June 1935	June 1941
Little Pee Dee .....	835	Dillon .....	June 1951	Under Construction
Myrtle Beach .....	312	Horry .....	Aug. 1934	July 1936
Oconee .....	1,165	Oconee .....	July 1935	June 1937
Paris Mountain .....	1,275	Greenville .....	April 1935	June 1937
Pleasant Ridge .....	300	Greenville .....	Sept. 1950	Under Construction
Poinsett .....	1,000	Sumter .....	Aug. 1934	Aug. 1936
Rivers Bridge .....	390	Bamberg .....	May 1945	July 1945
Santee .....	2,364	Orangeburg .....	Jan. 1942	June 1949
Sesqui-Centennial .....	1,500	Richland .....	Aug. 1937	June 1940
Table Rock .....	2,860	Pickens .....	May 1935	June 1940
45,723				

## Two New Bathhouses:

New bathhouses were constructed at Santee and Hunting Island.



Fishing is one form of family recreation enjoyed at the state parks.



The Santee bathhouse serves the new clear water swimming lake and is complete with dressing rooms, checking room, first aid and toilet facilities.

At Hunting Island a combination bathhouse and pavilion was built in the Negro section near the ocean front. In addition to conventional facilities the Hunting Island structure has a large assembly and rest shelter.

Both of these new facilities have had good use during the 1952 summer, with Hunting Island seeing exceptionally large crowds.

### **New Roads and Parking Areas:**

To somewhat answer the need for additional parking space, certain road improvements have been made at several of the parks through the cooperation of the counties, the State Highway Department and the legislative delegations.

The new entrance road at Santee State Park has been paved through the park to the picnic and bathhouse area. Additional parking has been provided at Hunting Island, and already this addition has proved inadequate, so that even more space must



Picturesque State Parks on the South Carolina coast—Myrtle Beach, Edisto Beach, and Hunting Island—attract many visitors each year.



be found. At Table Rock a new entrance road connects with the old and makes a loop road through the park. This road and two new parking areas were surface-treated.

### **Groins at Hunting Island:**

Two groins, of creosoted timbers, were constructed in the Negro area at Hunting Island State Park. The State Highway Department supervised the construction as they are in charge of all groin work on our coast line. These groins have stabilized an excellent beach front, and bathing use has mounted several fold.

### **Beach Village at Hunting Island:**

The Beach Village at Hunting Island, an area where individuals may build their own cottages on leased lots, has now begun to assume activity and development. Seven new beach houses are completed or under construction with several others in the planning stage.

Such a project as this, where individuals may have private development in a State-owned area, is unique in State Park circles. Some 130 lots, most of which are already leased, are served by a paved road, and additional lots will become available with the extension of the beach village road.

Lots are leased for 20 years with optional renewals, at a top rental of \$50 per year.

### **"Ranger Parks" Radio Series:**

The Ranger Parks School of the Air, "The World is so full of a number of things—", will be continued this fall over 10 radio stations. Beamed directly into the classrooms during the morning school hours the programs tell facts of history, conservation and nature in an interesting and exciting manner.

This year's 31 programs of 15 minutes each tell of action within a State Park and recount facts of science and conservation pertinent to the naturalistic programs of State Parks.

A teachers' manual serves as an aid in readying the class for listening, and the many letters written to "Ranger Parks" testify to the interest and reception.





The peaceful, calm atmosphere of State Parks like Barnwell and Aiken has been drastically changed by the influx of population in the AEC area.



### **The A.E.C. and Armed Forces:**

The influx of people caused by the building of the Savannah River A.E.C. installations has affected the two nearby parks—Barnwell and Aiken. A great many new visitors—more than 2 to 1 over former attendances—are going into these areas for swimming and picnicking—or just to get away from their emergency living quarters. These new and diverse people are quickly adjusting themselves in the ways of these heretofore quiet neighborhood parks. Hunting Island is also receiving many visitors from the area as it is their nearest beach.

Armed Forces personnel are present in practically every park, with certain ones like Table Rock, Paris Mountain, Myrtle Beach, Poinsett, Hunting Island and Sesqui-Centennial counting a large percentage of their use to these visitors. It is good that State Parks near military bases can make a day-to-day contribution to the recreational life of these men and their families.

### **Training of Personnel:**

For the third time a number of our Park Superintendents attended the annual training school of the Southeastern Association of State Parks held at North Carolina State College. The two weeks' course stressed operation fundamentals for the first year men, and for the repeaters specialized programs in public relations and in nature study were given. A total of 14 different superintendents have now attended the Raleigh sessions.

The North Carolina school supplements the regular training meetings held each fall for all superintendents in our South Carolina parks.

These training programs tend to keep the Superintendents up-to-date on all operations and tend to develop an esprit de corps within the organization.

### **Historic Areas:**

The Division of State Parks is charged by the Legislature to maintain half a dozen historical areas within the State and a special appropriation is made for the purpose.

The 1952 Legislature also directed the Division to assume responsibility for the Eutaw Springs Historical Site. This operation will begin July 1, 1952.

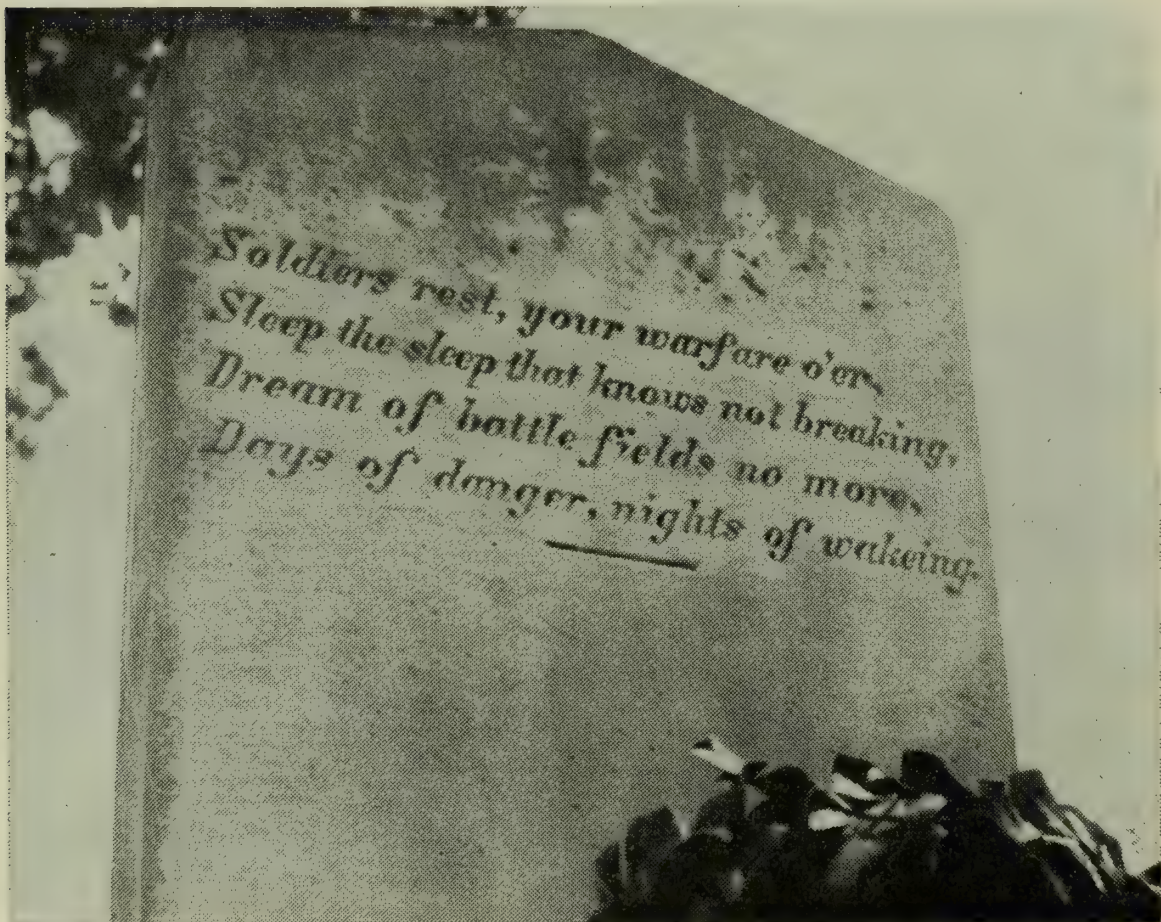
The Fort Watson Mound in Clarendon County and the General Thomas Sumter burial area in Sumter County are deeded to the Commission of Forestry and a definite program of maintenance is in operation.

The burial place of General Francis Marion at old Belle Isle Plantation in Berkeley County; and the burial sites of Col. Isaac Hayne in Colleton County, and Thomas Heyward in Jasper County are in private ownership and receive clean-up attention from the Commission.

General Andrew Pickens is buried in the Old Stone Churchyard at Pickens and this shrine is also under the charge of the Commission.

### **The Andrew Jackson Historical Area:**

The 1952 Legislature appropriated funds for the beginning of development into a park of an area surrounding the birthplace of Andrew Jackson in Lancaster County.



Monument at Rivers Bridge Confederate Memorial State Park—where a handful of Confederate soldiers fought a delaying action against Sherman during his march to the sea.



Some 350 acres have been acquired by the County and will be deeded to the Commission. The area has the historical significance as the birthplace of the 7th president of the United States.

Funds for the project became available July 1, 1952.

### **State Parks for Negroes:**

Pleasant Ridge in Greenville County is the only State Park exclusively for Negro use, although there are four areas in other State Parks for exclusive Negro use. Mill Creek in Poinsett State Park, Campbell's Pond at Cheraw State Park, and areas at Greenwood and Hunting Island State Parks are the locations of other Negro areas.

Within these parks are swimming beaches and bathhouses; picnic tables, grills and shelters, playfields, fishing lakes, toilet facilities; and at Mill Creek is the group camp for Negro youths.



Beach at the area for Negroes at Hunting Island State Park. This is one of five areas for Negroes provided by the Division of State Parks.

### **Recommendations:**

To the 1953 Legislature we respectfully make the following recommendations:

1. Make available an adequate budget for the increased operation of 21 State Parks, and to include especially an item—
  - (a) sufficient to offset depreciation of buildings, installations and equipment;

- (b) to supplement the personnel of 7 of the larger parks.
2. Make available funds for certain capital or permanent improvements, to include:
    - (a) The Pleasant Ridge development program, and additional facilities at all other Negro areas.
    - (b) Following the Charleston acquisition for a Negro park, one more such area be obtained to serve metropolitan Columbia and central South Carolina.
    - (c) Expansion of facilities in certain white parks, especially the new Little Pee Dee State Park, and parks whose development was halted by the outbreak of World War II.
  3. With the exception of Parks for Negroes as explained in "2-c" above, further acquisition of lands for development as State Parks should be considered most carefully. The only section of the state not already adequately served by State Parks is an area centering around Williamsburg County. State Parks for both white and colored are included in the Clark's Hill plans. With 21 parks already provided, South Carolina has a State Park system that compares favorably with those of other leading states.



## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Negro Areas
AIKEN STATE PARK Windsor, S. C., RFD .....	x	x	x	x	x	x	x		x				x		x		
BARNWELL STATE PARK Blackville, S. C. ....	x	x	x	x	x	x	x				x		x		x		
CHERAW STATE PARK Cheraw, S. C. ....	x	x	x	x	x	x	x	x			x		x	x	x	x	x
CHESTER STATE PARK Chester, S. C. ....	x	x				x	x				x		x		x		
CROFT STATE PARK Spartanburg, S. C., RFD .....	x	x	x	x	x								x		x		
EDISTO BEACH STATE PARK Edisto Island, S. C. ....	x	x	x	x	x	x	x	x					x		x		
GIVHANS FERRY STATE PARK Ridgeville, S. C., RFD .....	x	x	x	x	x	x	x	x			x		x		x		
GREENWOOD STATE PARK Ninety Six, S. C., RFD .....	x	x				x	x						x		x		x
HUNTING ISLAND STATE PARK Frogmore, S. C. ....	x	x		x	x	x	x						x		x		x
KINGS MOUNTAIN STATE PARK Kings Creek, S. C., RFD .....	x	x		x	x	x	x						x		x	x	
LEE STATE PARK Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x		
LITTLE PEE DEE Dillon, S. C. ....	x	x															
MYRTLE BEACH STATE PARK Myrtle Beach, S. C. ....	x	x		x	x		x	x		x	x		x		x		
OCONEE STATE PARK Walhalla, S. C., RFD .....	x	x	x	x	x	x	x	x			x	x	x	x	x		
PARIS MOUNTAIN STATE PARK Greenville, S. C., RFD .....	x	x	x	x	x	x	x						x	x	x	x	
PLEASANT RIDGE Cleveland, S. C. ....	x	x															x
POINSETT STATE PARK Wedgefield, S. C. ....	x	x	x	x	x	x	x	x				x	x		x	x	x
RIVERS BRIDGE CONFEDERATE MEMORIAL STATE PARK Ehrhardt, S. C., RFD .....	x	x		x	x	x	x						x		x		
SANTÉE STATE PARK Elloree, S. C., RFD .....	x	x		x	x	x	x						x		x		
SESQUI-CENTENNIAL STATE PARK Columbia, S. C., RFD .....	x	x		x	x	x	x						x		x		
TABLE ROCK STATE PARK Pickens, S. C., RFD .....	x	x		x	x	x	x	x			x	x	x		x		

Note: For overnight CAMPING, write in advance to Park Superintendent.

\* Where no regular Barbecue Pit and shelter are established temporary arrangements can be made at all Parks.



The responsibility to our children dictates the providing of economic opportunities and means of recreation for physical and mental health. These values must be taught to people of all ages.

The Commission's services to the people of South Carolina in the fields of forestry and State Parks meet those objectives. It is the function of the branch of information and education to educate people to the full use of the natural resources and Commission services.



# INFORMATION AND EDUCATION

## INTRODUCTION

Early leaders in forest conservation in South Carolina recognized the need for a program of information and education even before the State Commission of Forestry was created in 1927.

For example, Mr. Horace L. Tilghman, a prominent lumberman of Marion, persuaded Ovid Butler, Executive Secretary of the American Forestry Association, to publish a series of articles on forest conservation opportunities in South Carolina in the national magazine, "American Forests". Mr. Tilghman then personally purchased enough subscriptions to furnish the magazine for the year during which these articles were published to every member of the Senate of South Carolina, every member of the House of Representatives, and the Governor. Mr. Ben L. Meeks of Florence followed this up with an active program of acquainting Kiwanis clubs in South Carolina with the benefits a sound forestry program led by a graduate forester could bring to the state.

These men and several others believed that if the people had all of the facts, they would support this movement. Further, they knew that the forest land, whether in small patches on the agricultural landscape of the Up Country or in larger tracts in the Low Country, was largely owned by private citizens of South Carolina. Finally, they believed that control should remain in the hands of these owners, and that they would develop this forest land if taught why and how to do it.

Five of these farsighted leaders were appointed as the Commission's first members. It was, therefore, logical that the organic act creating the Commission contained the language that called for a program of information and education as a major function of the Commission.

These leaders, putting the language of the act into action, followed principles which they had used to crystallize sentiment in favor of creating the Commission.

The basic principle was then and is now that of teaching the values of good forest practices. This emphasis on the subject rather than on the Commission as an organization has resulted in improved forest practices on the ground, which in turn has progressed toward identifying the Commission with

the public good. The service has over-shadowed the server and results have eclipsed the organization. After 25 years this policy remains unchanged, and its soundness unquestioned. When the Commission's Division of State Parks was created as an outgrowth of the CCC program this principle applied to Parks resulted in emphasis on use of Parks rather than the organization providing this recreational service of the Commission of Forestry.

Today the average person's conception of the Commission is largely that of the phase of activity with which he has come in contact—like the well known fable of the three blind men describing the elephant. A landowner who has ordered and planted forest tree seedlings thinks of the Commission as an organization that sells seedlings. If he lives near a forest fire lookout tower, he thinks the Commission watches for fires. If he has visited a State Park he is apt to think of the organization as a recreational agency. If he has had a Commission forester examine his woodland and/or has had timber marked for selective cutting, that is his conception of the work of this 25 year old state agency.

However, in teaching forest and state park values constant effort has been directed toward *all* services of the Commission in order that South Carolinians can avail themselves of these services. Progress has been made over these 25 years. Forest fire occurrence has been reduced. The demand for forest tree seedlings continues to exceed the supply. Requests for woodland management assistance to private landowners continues ahead of our ability to comply. State Park attendance continues to rise—also beyond the capacity for which they were designed. Requests made of the branch of Information and Education itself have increased in proportion to these other branches of activity.

Progress has been made, but reasonable goals are still far in front of the organization.

Standard techniques in public education have been used within limits of funds and personnel. Generous cooperation has been received from school groups, women's groups, service and civic organizations, the press, radio, television, other governmental agencies, and a host of individuals. Field trips, demonstrations, contests, leaflets, posters, films, photographs, and news stories are standard tools.



## THE TURNING POINT

Progress in Information and Education has been steady but gradual throughout the Commission's 25-year history. However, in the field of forest fire prevention it has not kept pace with progress in actual fire fighting techniques. Woods fires have been reduced but the average occurrence of over 5,000 illegal fires per year is far too high and does not constitute an acceptable risk for timber growers. It also hamstringing the state's second ranking industry and its large contribution to the total economy of the state.

There is a valid reason for this lack of progress in fire prevention. To dig it out, the decision was reached in June 1950 to re-evaluate progress and re-analyze the problem. This was done and the result was to turn the spotlight of emphasis with *new focus* on the most vital problems the Commission was created to solve—woods burning and the resultant understocked condition of more than half of the forest land in the state.

As a result of *the June, 1950 decision*, this spotlight found its first form in full color as a published leaflet entitled "By Our Own Hand". It struck at the heart of the apathy and indifference toward and even endorsement of woods fires (and the resultant understocked timber stands). Illustrated with color photographs made in South Carolina by regular Commission personnel its basic theme was "*little*" trees in even a slow burning fire . . . die by our own hand". The central photograph showed a plowed firebreak separating annually burned woods from protected woods. On the burned side larger trees stood apparently unharmed—but no *little* trees. The protected side showed larger trees spaced too widely but *with a wealth of little trees growing up to replace them*. It showed in one picture fire as the agent responsible for understocked stands and protection the activity necessary for fully stocked stands.

This approach was not new. The difference from established prevention concepts was the June 1950 decision to focus attention on little trees as the *major* loss instead of just one of the many damages fire causes. Death to the *little* tree is *absolute*—final, and undeniable.

It is a simple idea and can be expressed in simple terms and illustrated—the key to success in programs of public education.

Other damages are *relative*, more difficult to express, and harder to sell, although they are important and should be used. Just as one example to illustrate the point, the argument that "woods fires slow timber growth" is subject to the pitfall of proving that "slow" is slow—the question is how slow. The argument itself is generally valid but close observers of timber growth can even point to *some* examples where *in their minds* it is not true.

It, with others, is briefly mentioned in the leaflet, but the major force of this instrument is directed toward the *major* factor: even little fires *kill* little trees.

### VISUAL AID FOR PERSONAL CONTACT

This leaflet was expensive and not intended for mass distribution but for Commission and certain volunteer personnel to use as a selling tool—color photographs to illustrate the outline of points to follow. It was presented to county personnel in district training meetings during the fall of 1950. They practiced using it on each other.

It was designed to counteract the lack of information on the natural cycle of tree growth and replacement. The assumption was that few people realized that normally the woods are full of little trees hidden in the grass and woods litter—and that *even little fires kill little trees*.

To test the accuracy of this assumption that fall some 500 people were asked this question by personnel of the Information and Education branch,

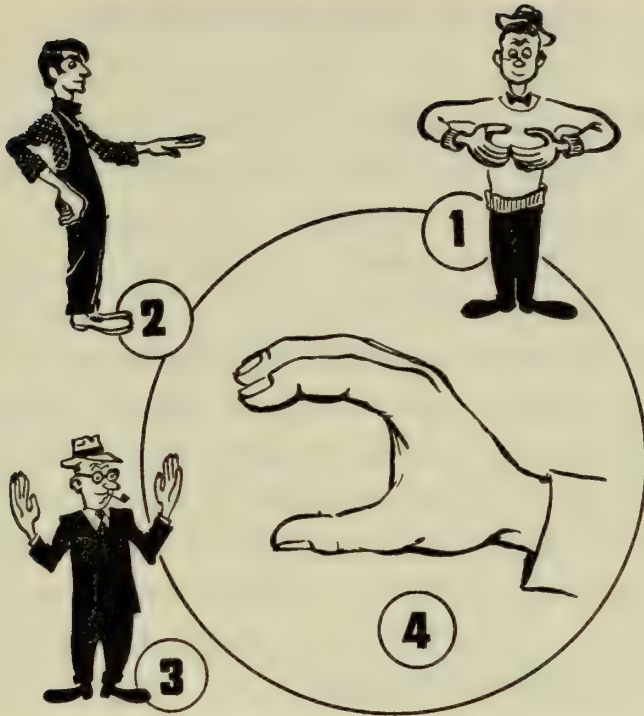
### "HOW BIG IS A LITTLE TREE?"

Most of the people who were surveyed worked for the Commission or in the woods in some capacity and normally would be expected to think of a "little tree" as being that size. The rest of the group were people from nearly every walk of life.

This was certainly not a scientific public opinion poll, but it did shed light on the problem.

If the little tree is not even *known* at the tender stage just after sprouting from seed, it is no wonder that few people consider the loss in a fire that creeps along the ground. *Most* woods fires in South Carolina are *not* the roaring infernos that blaze





Answers to survey question, "How big is a little tree?":

1. Some people said "This big."
2. Most people said "This high."
3. A few thought of tree seedlings in a shipping bundle and said "This long."
4. Not one person in 500 said "This high."

through the tops of trees. The average fire burns close to the ground and flares up only now and then. In the spring following the fire, green grass and wild flowers cover the fire scorched land with a mantle of beauty. The larger trees are blackened with a little soot—usually only a few feet up the trunk from the ground and the damage to them is not apparent. But the real damage is death to the millions of little trees that were only an inch or so high and hidden in the grass. Even a flame from a paper match will kill a little tree at this stage in its growth. Losing them every year keeps our woodlands poor.

The leaflet telling this story and the training in its use were effective, but it really appeared too simple to 'take' on first exposure. The concept was born in June 1950 and put into a training program in September, October, and November of that year. It had the backing of the State Forester's supervisory personnel and in some instances brilliant ingenuity and use of the concept was made by some field personnel during the fire season 1950-51. But the idea lacked refinement and clarity and it lacked proper selling tools. It also needed a plan of action that would fit local problems, i.e., specific causes of woods fires.

## THE FIRE PREVENTION PLAN

The branch of Forest Fire Control and the branch of Information and Education working together completed a tentative plan that was designed for local adaptation by Rangers, Wardens, and other county personnel. It was begun in the late fall of 1950 but was withheld from use pending analysis of the plan in the light of the 1950-51 fire season. It was then re-edited for presentation to field personnel at training meetings during the early fall of 1951. Its chief aim was to enable a County Ranger with his wardens to (1) analyze the chief causes of fires in the county—or even warden district within the county—(2) rewrite their own plan from the original guide and (3) direct a systematic program of public education toward the two or three major causes. This was in contrast to the old practice of broadside attacks against all causes.

## TEACHING PREVENTION IN THE WOODS

The most effective technique so far to be used in the program is showing the problem to the landowner in his own woods. This is an old device but the emphasis on the little tree has given it a new twist. To draw a parallel in education, classroom teachers constantly strive for an approach that engages interest, challenges imagination, and strikes a spark that motivates action or further study.

In this case the fire fighting ranger has found how to strike the spark that *prevents* fire. He shows the landowner that nature is planting trees for him free. He gets down on his hands and knees and pulls the grass or leaves apart until he finds a little tree that has just sprouted from seed. A pine tree a month or so after germination is one or two inches high and (in the case of most species) already has begun to look like a tree. This fires the interest of the landowner and he usually gets down on his hands and knees to see how many they will run to the acre.

The ranger can then measure off a small square roughly 6'7" on each side, and that is equal to 1/1000 of an acre. The number of little trees hidden in this area of grass multiplied by 1,000 equals the number per acre.

In most cases this figure will be several times the rate of planting which allows for normal mortality. Thus the little



trees can be assigned at least the value of planting cost—usually \$10.00 per acre. Nature adds this value at *no* cost. The dollars and cents value is actually incidental in this lesson. The real value is the stimulation the landowner experiences when he identifies *his* little trees at this early stage. Motivation takes place when he tries to see how many he can find.

Almost invariably the landowner will say, "I never knew that before". This standard reaction convinces the ranger that he has a story to tell even the most prosperous and informed landowner. He has learned to strike the spark that may go a long way toward preventing fire. The argument that these little trees belong to our children has a moral appeal that is hard to deny.

### TECHNIQUES AND TOOLS TO DO THE JOB

Field personnel—especially county fire control personnel—could not be expected to do an effective job of public education without adequate teaching aids when it is not practical to take the audience into the woods. Therefore, during the summer of 1951 a set of 40 colored 2 x 2 slides was prepared and a complete slide projector and screen outfit was furnished each county ranger in the state. The slides centered around the "little tree" concept of fire prevention, but the set also included a well rounded program of forest conservation. From time to time these basic slides have been supplemented by local slides to illustrate the problem in local terms.

### COMMISSION MOTION PICTURE—"BY OUR OWN HAND"

District Forester's offices are equipped with motion picture projection equipment which is available to the County Ranger by arrangement. This is another educational tool at their disposal.

During the summer of 1951 foresters of the branch of Information and Education produced a 16 mm. motion picture in color and sound which tells the basic story of the "little tree" concept in fire prevention. It was filmed in South Carolina and with realistic and sometimes with dramatic logic it gets across the point in less than 4 minutes. Its first public showing was at the national meeting of the Association of State Foresters at Charleston on October 3, 1951. It drew spontaneous applause

at one point during the movie when the little tree dies dramatically in a very quiet and creeping fire.

The Southern Pulpwood Conservation Association of Atlanta adapted this film to regional use with permission of the Commission.

Under a similar arrangement the Texas Forest Service also made use of the film by adapting it to use in Texas.

The film itself has been very effective in reaching the public. Its length and novel approach has made it especially suitable for programs where time is limited.

However, probably its greatest effect to date has been its use as a fire prevention training aid in that it trains hard working fire fighting personnel in the art of expressing an idea.

It has also been used in convincing other agencies producing educational materials which they distribute in South Carolina that these materials support the story fire control personnel are telling on the ground.

### **COMMISSION PHOTOGRAPH—"THE HAND BEHIND THE LITTLE TREE"**

In addition to written material, colored slides, and the movie "By Our Own Hand", it was clear that the story needed to be translated into a form that could be printed. In September 1951 foresters in the Information and Education branch planned and produced the black and white photograph that has received national and regional recognition. At the close of the fiscal year 1951-52 the number of printed impressions exceeded 1,000-000 copies of various kinds of materials. This photograph was enlarged to mural size 6 feet high 5 feet wide and hand colored for exhibit purposes. In answer to a request for a display it was first exhibited at the national meeting of the Society of American Foresters at Biloxi, Mississippi December 10-15, 1951. It has since been used at 15 special shows, festivals, etc. in South Carolina and was seen by an estimated 27,700 people. It was also shown to the National Director of the Cooperative Forest Fire Prevention Campaign and the science editor of Newsweek on their visit to the State Forester's office on May 14, 1952. The exhibit also resulted in a request by the Southern Pine Association to re-photograph the scene in full color. This was done and it was used for the front cover of their excellent booklet, "The Story of Southern Pine".





This State Commission of Forestry original photograph has been effective in translating the little tree fire prevention story in terms of a simple photograph. To date its reproduction has produced more than 1,000,000 printed impressions.

It appeared in color on the front cover of the February 10, 1952 Magazine section of "The State" newspaper and in black and white on the front cover of the January 1952 issue of "The Forest Farmer", the regional magazine of the Forest Farmers Association Cooperative of Valdosta, Ga.

On the front cover of the April 15, 1952 issue of The Southern Lumberman it appeared as a drawing. The photograph in black and white was also used on the front cover of the 1950-51 annual report of the Commission.

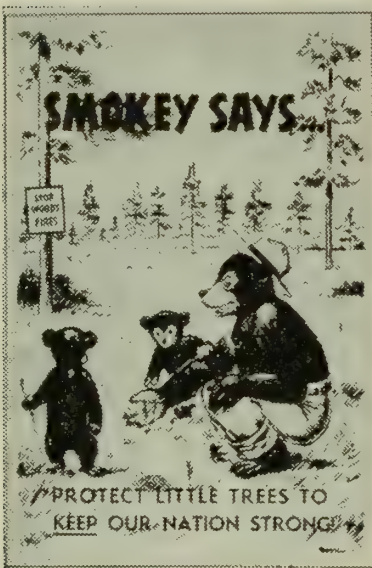
It received national recognition when it was used in the June 2, 1952 issue of Newsweek magazine as part of a national story on the U. S. Forest Service. South Carolina, as a result of the photograph and of the science editor seeing the film and hearing the story of Rangers and Wardens using the idea, was the only State forestry organization specifically mentioned.

American Forest Products Industries, Inc., of Washington, D. C., used the photograph in a regional pamphlet featuring forest fire lookout towerman and rules entitled, "This Man Needs Your Help". They also used it as a news story which they mailed to South Carolina newspapers.

## COMMISSION POSTERS

The basic idea that "Even Little Fires Kill Little Trees" was used in the Commission's production of a series of 3 posters in color. They were designed as rough ideas by Commission foresters and the final art work was executed by Columbia artist, Jack Smyrl. They were first presented to field personnel in the early fall training meetings in 1951.

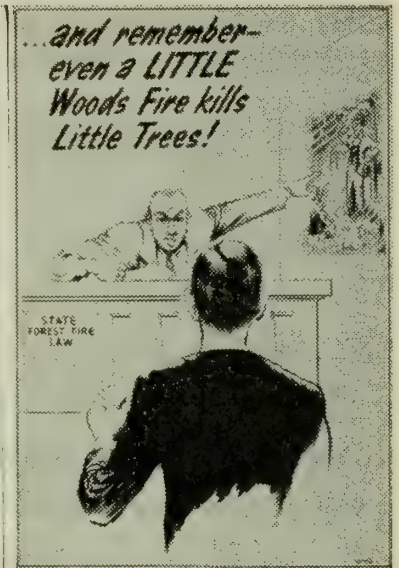
The first of the series was beamed to school children and teachers in particular and to adults in general through the children. Capital was made of the national reputation of Smokey Bear, well known to school children as a symbol of forest fire prevention. He was placed in a teaching situation in understocked woodlands with the two little bears (his "children"). He teaches them the lesson that we must "Protect little trees to *keep our nation strong*".



Poster No. 1



Poster No. 2



Poster No. 3

The second poster in the series was directed to the landowner. It depicted a father and son in a typically understocked woodland in South Carolina. The little boy parts the grass with his hands, shows his dad the little trees, and asks hopefully "These are my trees, aren't they Daddy?" Father looks at son and at the little trees, and appears to get the idea, "What children won't teach parents next!"

The third colored poster is the Commission's first use of art to forcefully express its position on the enforcement of the forest fire laws of South Carolina. A magistrate has before him a citizen. He could be anybody, because no one group in



South Carolina is responsible for our high fire occurrence. On the wall in the courtroom scene is the second poster just described. On the magistrate's desk is posted the State Forest Fire Law. The magistrate is pointing—not to the violator of the law—but to the "landowner and son" poster on his wall as the *reason behind the law*. The magistrate points up the lesson, ". . . and remember, even little fires kill little trees". The offender is shown with his back turned to anyone looking at the poster, because of the Commission's policy not to embarrass anyone but *to teach the value of protecting our forest resources from fire*.

### OTHER STATES USE COMMISSION POSTERS

By special permission of the Commission the states of North Carolina, Georgia, Florida, and Texas used 31,000 reprints of various combinations of these three posters to fit in with their own materials. The Commission is glad to share these materials and there is always the possibility that some of their effect in other states may come home to South Carolina as people travel.

### CFFP CAMPAIGN INCORPORATES SOUTH CAROLINA IDEA

The Cooperative Forest Fire Prevention Campaign through the Advertising Council and the Advertising Agency of Foote Cone and Belding produced a national news ad showing the development of the little tree idea as a single editorial cartoon strip.

The Jelly Elliott series of radio recordings used the idea by having the star work it in between hill billy musical selections. Fifteen radio stations in South Carolina carried these 13-week programs.

### RESULTS OF THE NEW FIRE PREVENTION PROGRAM

In this silver anniversary annual report, it is sufficient that long established activities be recorded as making progress. No fire prevention program of only two-year duration can be reported as achieving specific success in making a lasting reduction in the number of fires. Woods burning in many areas of the state is a deep-seated practice. Change in life-time habits is traditionally a slow process. It is believed that further reduction in fire occurrence will come only to the extent that the

principles of the new approach are applied—and only after an unpredictable period of time. Increased demand, short supply, and higher timber values will do much to develop the appreciation needed to achieve this end.

There is yet another important result that may be reasonably expected from this approach to fire prevention. In the field of the reforestation of idle land beyond the reach of seed trees, a more fire conscious public makes tree planting a better risk. Tree planting, in turn, intensifies the landowner's desire to prevent fire. In addition, an awareness of little trees planted by nature in the woods supports an appreciation of the value of trees planted by man on idle land.

In the field of wise harvesting—partial or selective cutting—identification of the little tree as a stage in the growth of timber gives the landowner a better appreciation of the future possibilities of careful cutting.

It is the opinion of many foresters that a more realistic approach to fire prevention creates greater confidence in foresters as advisors to landowners on planting, cutting, and other woodland management problems. For example, a forestry organization in the South—whether public or private—that depicts fires as they *usually* occur (slow-burning—close to the ground) and then proves that they cause specific damage (death to little trees) should inspire greater confidence in that organization's program as a whole.

Of course, unusual or "blow-up" conditions should be publicized for what they are—destructive to large timber, other property, and even dangerous to human life. Even here, man's activities are conditioned by his long-held belief that woods fires are not apt to cause any damage, and he is even careless when the woods are dry and the wind high. For this reason it is recommended that a statement be used to indicate that little trees are *always* the loser and that the hot fire is unusual.

#### RECOMMENDATIONS FOR TEACHING FOREST FIRE PREVENTION IN SOUTH CAROLINA

1. Woods fires should be shown as slow-burning quiet fires with low flames close to the ground.

The reason for this recommendation is that is the woods fire South Carolinians are most accustomed to seeing.



If fire is shown as a roaring inferno, the reaction is that it doesn't happen that way in this state. Of course we do occasionally have a hot fire that kills large trees—but it seldom occurs.

2. Woods fires should be shown as killing little trees. This is the damage that occurs in even a very quiet, slow-burning fire. Of course there are many other ways in which fire damages timber, but they are difficult to measure and even more difficult to prove—especially to the man who believes in burning the woods.

No matter what occupation our children pursue, their future will be affected tomorrow by what we do to protect little trees today.

3. The many valuable products that come from the forest provide a good teaching device in forest fire prevention. These products should be shown as originating with the little tree.

Many landowners in South Carolina believe they can have these products and burn the woods too. Actually most people who burn their own woods do not consider fire as affecting woodland production at all.

Much of the general apathy to the problem of woods burning has its roots in the fact that many prominent and respected people burn their own woods. These same people in many cases have made money selling timber in spite of this practice.

Furthermore, many businessmen in town have some realization of the value of forest production to their businesses. But they also share the belief of woods-burning landowners—that woods fires don't really hurt anything. Little trees are needed for many of these people to stay in business. This is especially true in the low country where we have the greatest activity of wood using industries—the low country is also our biggest fire problem.

4. The man who burns the woods in South Carolina should be shown as making a mistake rather than as committing arson. Most deliberately set fires are the result of mistaken belief. Very few are maliciously set.

## 1951-52 FIRE PREVENTION

The first complete year of the new and vigorous fire prevention program has just been completed. New prevention tools and a new outlook on the nature of damage done by fire has provided a real and effective interest in the part of both Commission personnel and citizens alike in further reducing the number of fires that annually still plague our woodlands. The fact that a great many people in our state think that our average quiet, slow-burning woods fire does very little permanent damage is a primary factor that contributes to the continued high fire occurrence. Most people do not realize that hidden in the grass and straw are millions of little trees that Nature plants each year. Annual fires kill these little trees that could have meant better stocked woodlands, and in only a few years more income from the land in the way of raw materials needed for ever-expanding woodusing industries.

Emphasis on the fact that even a slow-burning, quiet fire kills little trees, as simple a statement as it is, provides a basic understanding of the nature of fire, and the damage that fire usually causes. It further provides our field personnel with an indisputable point on fire damage that can be brought to the attention of any landowner or tenant no matter what his reason for either apathy to fire or actual sympathy with the use of fire in his woodlands may be.

To make possible a strong fire prevention program as well as to coordinate activities within the state, a fire prevention plan was initiated during the past year. This plan was supported by new tools and posters, in addition to the regular supply of Cooperative Fire Prevention Campaign material as supplied by the U. S. Forest Service in cooperation with the various state organizations within the United States. To supplement the printed material provided by the CFFP Campaign the South Carolina State Commission of Forestry produced three basic posters to localize the approach to fire prevention.

The Cooperative Fire Prevention Campaign is one among several public service campaigns guided by the Advertising Council, Inc. The Advertising Council is a non-profit organization formed and backed by American business, for the purpose of conducting campaigns for the welfare of the nation.



Foote, Cone and Belding, a well known advertising agency, volunteers time and service free of charge in making the Co-operative Fire Prevention Campaign materials possible.

The Cooperative Fire Prevention Campaign again produced thirteen radio programs featuring "Jelly Elliott and The Three Knotheads" which were distributed to the states throughout the nation.

A new and very effective prevention tool was provided every county in the state in that a 35 mm. slide projector was given to each county ranger for use in the schools and other group meetings. Along with the slide projector a basic series of some 40 slides was provided which could be used to tell a fire prevention story. In addition to the basic set, many slides have been taken within the counties to supplement the general slides already provided. This slide equipment has been used by not only the county rangers but wardens and some towermen as well.

The 4-minute "home grown" movie, "By Our Own Hand" which tells the story of the damage to little trees in the state has proved a distinct help in carrying out the new and vigorous fire prevention campaign.

The following table shows the distribution of CFFP and state-produced fire prevention materials made during the year:

#### Distribution of Fire Prevention Material

##### CFFP

Posters .....	21,250
Bookmarks and Blotters .....	90,000
Stamps (sheets) .....	20,000

##### STATE

Posters .....	15,000
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Total .....	146,250
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#### MORE TREES FOR SOUTH CAROLINA

The "More Trees for South Carolina" project, designed to create more income for owners of woodland and assure a continuing supply of raw materials for the woodusing industries of the state was carried on during 1951. The project was spon-

sored by the American Legion, Department of South Carolina, and American Forest Products Industries, Inc., in cooperation with organizations, associations, landowners, and others interested in the best development of the forest lands in the state.

Cooperators included the S. C. State Commission of Forestry, Clemson College Extension Service, the lumber, pulp and paper and other industries, Vocational Agriculture Division of the State Department of Education, industrial foresters, woodland owners, and others interested in forestry.

A series of ads, editorials, and news articles appeared in every paper in the state, and motion picture film trailers were shown by County Agents, foresters, and others in connection with the project. Some 120,000 copies of a booklet "Cash Crops from South Carolina Woodlands" were printed for mailing to landowners, American Legion members and others. Some 756 people returned the card enclosed with each booklet asking for further information on forestry. These requests were handled by foresters of the pulp and paper industry, the Commission and the Extension Service. Forestry demonstrations were held in connection with this project with an attendance of approximately 400.

This project has created much interest in forestry in a number of communities, and it is expected that the results of the project will be felt for some time to come, in the form of increased interest in forestry and conservation.

### FORESTRY DEMONSTRATIONS

A demonstration is an effective way to get forestry information before the people. During a demonstration the actual forestry practice, whether it be fire control, reforestation, cutting or other activities, is carried out on the ground. For example, if the demonstration concerns planting, the group is taken through the planting process step by step with demonstrations and explanations. To complete the demonstration, printed material on planting is given each person present. Demonstrations on other phases of forestry are conducted in a similar manner.

During the year 2,799 persons attended 66 demonstrations conducted by personnel of the Forestry Commission on forest fire protection, correct cutting methods, reforestation, and other forestry activities.



## CONSERVATION WEEK AND ARBOR DAY

Conservation week is the one week during the year that is especially set aside to call to the attention of all our people the necessity of wise use of all our natural resources. According to South Carolina law the first Friday in December is observed as Arbor Day and the week in which that Friday occurs is observed as Conservation Week.

Many people, agencies, and organizations cooperate each year to make Conservation Week a success. The Garden Clubs and the Federated Women's Clubs of South Carolina sponsor the observance of Conservation Week with the Commission of Forestry. Clemson College Extension Service, the Soil Conservation Service, the State Department of Education, newspapers, radio stations, and other groups cooperate in placing the challenge of Conservation before the people of South Carolina.

Realizing that special school materials are needed during Conservation Week, the Forestry Commission prepares a special issue of "Forestry and Park Notes" each year. This is distributed to schools, churches, civic and patriotic organizations and other interested groups.

Personnel of the Forestry Commission and other cooperating groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

A total of 1,015 Conservation Week and Arbor Day programs were held, with 99,590 persons attending.

## TOWERSITE IMPROVEMENT CONTEST

The annual towersite improvement contest is held to encourage a complete "live-at-home" program, and to improve and develop the small areas of state-owned land that make up the tower sites, located over the state.

Because of the necessity of locating towers on high points, many tower sites are on poor, unproductive land. The contest has encouraged towermen to build up, develop and beautify even the worst of these areas, while, at the same time, making a better living for his family and himself.

During the year, the towermen and their families plant flowers, grass and shrubs, grow and can vegetables and fruit,

raise livestock and poultry, keep the towers and other buildings clean and in as good condition as funds for repair permit as well as keeping a sharp lookout for woods fires.

This year the following winners were selected:

Doris K. Taylor, Lake Murray Tower in Lexington County, 1st State Prize.

Eva C. McCoy, Bonneau Tower in Berkeley County, 2nd State Prize.

Mrs. E. L. Burgess, Cleveland Tower in Greenville County, 3rd State Prize.

Mrs. Adell Adams, Saluda Tower in Saluda County, 4th State Prize.

Each of these towermen also won first prize in the contest in the forestry district in which the towers are located.

Other district winners were:

G. Percival Kolb, Black River Tower in Sumter County, 1st Camden District Prize; E. B. Wilson, Philadelphia Tower in Darlington County, 1st Florence District Prize; Willie Reed Bishop, Cane Branch Tower in Colleton County, 1st Walterboro District Prize; O. L. Chaplin, Orangeburg Tower in Orangeburg County, 2nd Aiken District Prize; Mrs. R. C. Condrey, Rosemary Tower in Sumter County, 2nd Camden District Prize; Lila Hatcher, Ballast Ridge Tower in Marlboro County, 2nd Florence District Prize; Mrs. W. W. Watts, Sampit Tower in Georgetown County, 2nd Kingstree District Prize; Mrs. R. C. Timmerman, Epworth Tower in Greenwood County, 2nd Newberry District Prize; Mrs. Clara Morgan, Oakway Tower in Oconee County, 2nd Spartanburg District Prize; and Mrs. Thelma Garvin, Adams Run Tower in Charleston County, 2nd Walterboro District Prize.

## MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement lectures or talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus.

Films on forest fire control, forest management, reforestation and other forestry subjects were shown to school groups, church



gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others. During the year 374 showings were made to 35,359 people.

During the year the Information and Education Branch produced a special 4-minute motion picture in color and sound to help carry out the theme of the Commission's forest fire prevention program. This movie was shown as part of the Commission's exhibit at the State Fair, and at the Sumter and Florence fairs. Other southern states have expressed an interest in adapting this film to their own conditions, and several states have had copies made for their use with the approval of the S. C. State Commission of Forestry.

County Agents of the Clemson College Extension Service held 182 showings attended by 9,586 people this year.

### VOCATIONAL AGRICULTURE SCHOOL FORESTS

An excellent means of getting forestry information to many people is through the school forest program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. For



A vocational agricultural teacher pointing out to student insect damage to standing tree invited by stacking freshly cut timber against it.



several years forestry training schools were held for all vocational agriculture teachers in the state. They learned the latest methods of forest fire protection, reforestation and forest management at these meetings conducted by foresters of the State Commission of Forestry. The teachers have carried the information back to their students who use it in their work on school forests and on home forestry projects.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut—which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them, as well as all members of their families conservation minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes.

The Forestry Commission sponsors the School Forest Contest, awarding modest prizes to the schools and teachers who have the best school forests. This year the following schools were awarded prizes in the contest:

The Walterboro High School FFA Chapter won first prize in the lower state division.

The Blackstock High School FFA Chapter won first prize in the upper state division.

The Ehrhardt High School and St. George High School FFA Chapters tied for second place in the lower state area.

The Dentsville High School and Pendleton High School FFA Chapters tied for second place in the upper state area.

The Vocational Agriculture Teachers of the winning schools were also awarded prizes.

The goal of the Forestry Commission and the Division of Vocational Agriculture is to have at least one school forest in



each county in the State. They are valuable as demonstration areas and teaching aids, and they stimulate much interest among the people of the community. In some cases groups of townspeople have gone to agriculture teachers and have asked for a detailed explanation of the activities being carried on on the forest.

### RESOURCE-USE EDUCATION

The Resource-Use Education movement has stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the State Parks for this purpose. It has been demonstrated that using these facilities and camping on school time creates a very effective teaching situation.

The State Commission of Forestry welcomes this instructional use of state parks, and Commission personnel cooperated with several groups during the year to develop worthwhile projects in day camping and school camping at the state parks.

During the year the conservation committee of the South Carolina State Chamber of Commerce undertook to prepare a Conservation Source Book as one phase of a project to encourage the teaching of conservation in the schools of the state. The State Commission of Forestry with the cooperation of foresters of other agencies prepared the basic information for the section dealing with Forest Conservation.

A special project of the National Association of Biology Teachers was begun during the year with the aim of encouraging biology teachers to undertake projects in conservation. The Information and Education Branch is working with the state committee that was organized to carry out this project in South Carolina.

### TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and state parks before many groups. The quality of talks improved considerably during the year due to training, and the use of colored slides with the talks undoubtedly made the talks much more interesting. The Commission's Branch of Information and Education has nearly 2,000 colored slides on various phases of forestry and state park activ-

ities. The slides are available to all members of the organization and they have been used to illustrate talks and lectures as well as for training aids during personnel training sessions.

During the year a total of 1,948 talks were made by Commission personnel to 88,462 people. Garden clubs, church groups, school groups, civic and patriotic organizations were among those requesting talks.

## RADIO

Radio is becoming more and more valuable in getting forestry and park information and problems to the people. At the present time no other means can get emergency information to as many people as quickly as can radio. During the past fire season it was necessary in some instances, that the people of the state know the fire conditions immediately. In many cases information was given radio stations by telephone and in a matter of minutes it would be on the air. Cooperation such as this is invaluable.

Several districts have regular educational radio programs. All districts have used radio to some extent. This year more rangers than ever before utilized radio to bring information on forestry to people in their counties.

As Commission personnel become more experienced in radio work, undoubtedly the programs will become more informative and interesting and will, of course, become more effective as educational tools.

An outstanding example of the use of radio was the airing of the "Jelly Elliott" recorded series made available by the cooperative forest fire prevention program. This series concerned fire prevention generally and ran for 13 weeks on 20 radio stations in the state. This excellent coverage is an indication of the fine cooperation given the Commission by radio stations.

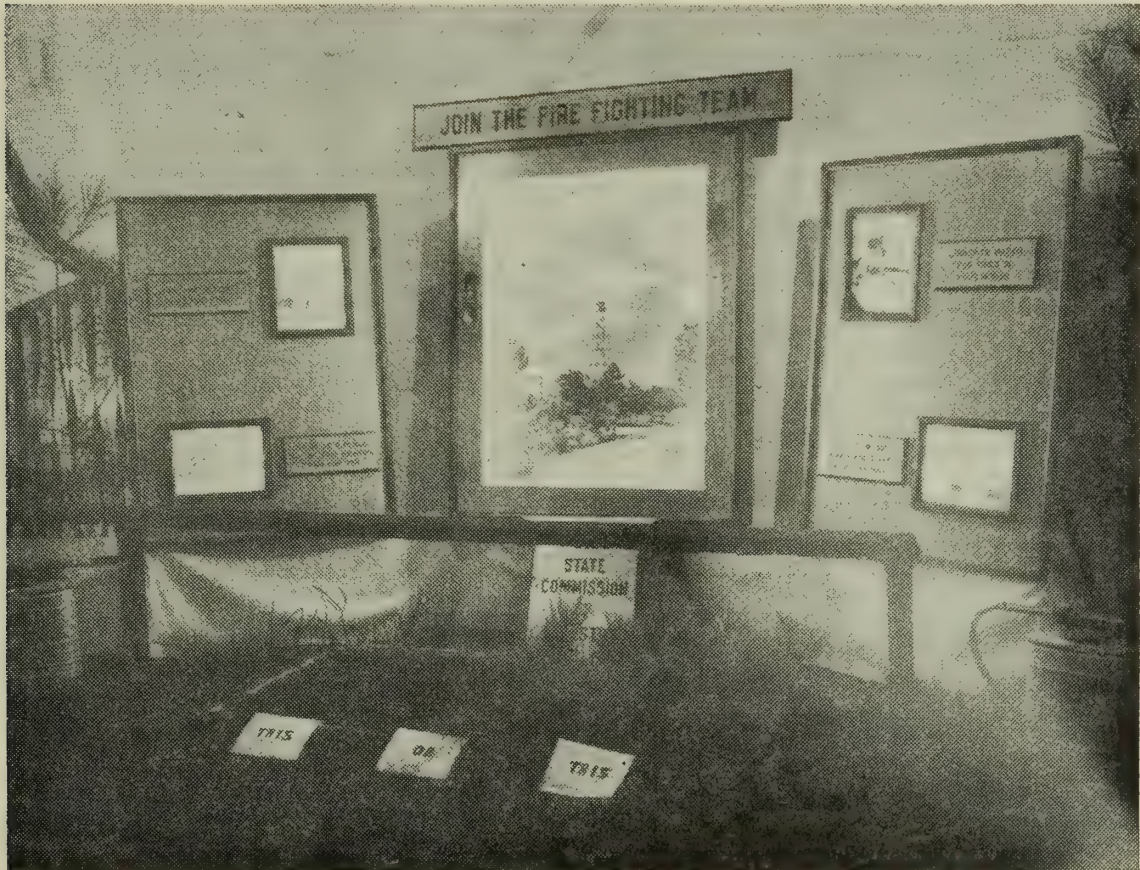
The "Ranger Parks" series of programs which were started in the spring of 1951 with 12 15-minute programs broadcast on 8 stations in the state were continued during the 1951-52 school year. A new series of 31 weekly 15-minute programs were broadcast by 10 radio stations in South Carolina. They are planned, directed, and produced by the S. C. State Commission of Forestry.



These programs were designed particularly to acquaint school children with conservation, history, science, and nature study by means of programs having their setting in the State Parks. On five of the programs an announcement was made inviting listeners to write in for a free copy of the Conservation Pledge, which were obtained without charge from the S. C. Wildlife Federation. A total of 777 requests were received. A questionnaire sent to the elementary schools in the Columbia City School System and answered by 13 of the 23 elementary schools indicated that more than 2,000 children in these schools alone listened to the program regularly. Many encouraging comments were received from all sections of the state, and plans are being made to continue this series of radio programs during the 1952-53 school year.

### EXHIBITS

Forestry Commission personnel welcomed the many requests by county fair organizations, garden clubs, church, school and other groups for educational forestry and state park exhibits because they provide an excellent opportunity for placing forestry and state park information before the people.



County fairs provide a good opportunity to help enlist public support in the Commission's activities.



The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits where practicable in an effort to attract the attention of people attending fairs and special gatherings.

Until the past several years an exhibit was rarely requested except for state and county fairs. During this year, garden clubs and other groups requested exhibits regularly throughout the year. This is an indication of interest in forestry and state parks activities by various groups of people.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and state park information through personal contacts by Commission personnel on duty and through the distribution of literature.

The following is a record of exhibits displayed:

#### RECORD OF EXHIBITS 1951-52

Location of Exhibit	Type of Exhibit	Estimated Attendance
Sumter .....	Fire, Management & Planting .....	20,000
Pageland (Chesterfield) .....	Woodlands That Pay .....	10,000
Laurens .....	Pine Seedlings for Your Idle Acres .....	25,000
Kingstree (Williamsburg) .....	Join The Fire Fighting Team .....	3,500
Union .....	It Takes Men to Fight Forest Fires .....	25,000
Easley (Pickens) .....	Seed to Sawmill .....	5,000
Chester .....	Woodlands That Pay .....	20,000
Rock Hill (York) .....	It Takes Men to Fight Forest Fires .....	40,000
Spartanburg .....	Seed to Sawmill .....	200,000
Lancaster .....	Woodlands That Pay .....	14,000
Lancaster (c) .....	Woodlands That Pay .....	6,000
Anderson .....	Join the Fire Fighting Team .....	80,000
McCormick .....	Pine Seedlings for Your Idle Acres .....	3,400
Bishopville (Lee) .....	Forest Enemy Number 1—Fire .....	21,000
Aiken .....	Pine Seedlings for Your Idle Acres .....	10,000
Chester (c) .....	It Takes Men to Fight Forest Fires .....	8,000
Florence (c) .....	Fire, Management and Planting .....	50,000
Greenwood .....	Seed to Sawmill .....	30,000
Newberry .....	Pine Seedlings for Your Idle Acres .....	2,500
Manning (Clarendon) .....	Woodlands That Pay .....	3,500
Charleston .....	Forest Enemy Number 1—Fire .....	35,000
Loris (Horry) .....	Look at the Difference .....	8,000
Anderson (c) .....	Join the Fire Fighting Team .....	25,000
Dillon .....	You Can Have Your Cake and Eat It Too ...	5,000
Marion .....	10 Steps to Prevention .....	50,000
Charleston (c) .....	Equipment Saves Time and Timber .....	15,000
Florence .....	Fire Protection (Movie By Our Own Hand) ...	10,000
Camden (Kershaw) .....	Seed to Sawmill .....	12,000
Sumter (c) .....	Fire Protection (Movie By Our Own Hand) ...	12,000
Moncks Corner (Berkeley) .....	Forest Enemy Number 1—Fire .....	4,000
Camden (c) .....	Seed to Sawmill .....	7,000
Walterboro (Colleton) .....	Fire Protection .....	7,000
County Fair Total .....		766,900
State Fair:		
Columbia .....	Fire Protection and State Parks .....	200,000
Columbia (c) .....	Fire Protection and State Parks .....	80,000
State Fair Total .....		280,000



**Exhibits Other Than County or State Fairs:**

Delta (Union) Dedication of new woodyard of International Woodlands That Pay and Pine Seedlings for Paper Company .....	Your Idle Acres .....	400
Orangeburg (Flower Show) .....	The Thinking Behind Fire Prevention .....	2,500
*Mt. Pleasant (Flower Show) .....	The Thinking Behind Fire Prevention .....	1,000
Walterboro (Flower Show) .....	The Thinking Behind Fire Prevention .....	500
Greenville (Carolina Lumber Dealers Ass'n) .....	The Thinking Behind Fire Prevention .....	1,000
Rock Hill (Children's Museum)....	The Thinking Behind Fire Prevention .....	2,000
Lake City (Propst Theater) .....	The Choice Is Ours .....	1,100
Lake City (Fire Station) .....	The Thinking Behind Fire Prevention .....	200
Dentsville (Community Fair) ...	Selected Posters .....	900
Springtown (c) .....	Improvised .....	4,000
Lancaster .....	The Choice Is Ours .....	2,000
Sumter (Garden Club) .....	Automatic Slide Projector .....	1,500
Greenville (American Legion) ...	Automatic Slide Projector .....	3,500
Columbia (Palmetto Theater) .....	The Thinking Behind Fire Prevention .....	12,000
Columbia (Boy Scout Jamboree)...	The Choice Is Ours .....	1,000
Batesburg-Leesville (Flower Show)...	The Thinking Behind Fire Prevention .....	200
Elloree-Parlers (Garden Club Flower Show) .....	The Thinking Behind Fire Prevention .....	200
Charlotte, N. C. (Ft. Roc Drive In) .....	Selected Posters and Equipment .....	3,500
**Sumter (Iris Festival Parade) ...	Parks Exhibit (Poinsett) .....	50,000
Walterboro (Theater) .....	The Choice Is Ours .....	1,000
Lancaster (Merit Badge Show) ...	Improvised .....	2,000
Sumter (Theater) .....	The Choice Is Ours .....	1,500
Camden (Theater) .....	The Choice Is Ours .....	1,500
Shaw Field (Air Show)— Sumter County .....	The Thinking Behind Fire Prevention .....	3,200
Special Exhibits Total .....		96,700
GRAND TOTAL .....		1,143,600

\*Charleston (Alhambra Hall) Mt. Pleasant Garden Club

\*\*"Enjoy Poinsett State Park in Sumter County and 21 State Parks in South Carolina."

## SOUTHERN INFORMATION AND EDUCATION CHIEFS

An informal organization of Assistant State Foresters in charge of Information and Education activities in the forestry agencies of thirteen southern states has contributed significantly to the development of effective regional ideas and materials such as posters, leaflets, exhibits and movies.

At the 1951 meeting of the organization Assistant State Forester John C. Witherspoon of the S. C. State Commission of Forestry was elected Chairman.

The efforts of SIEC have been felt in making more localized material available through the CFFP Campaign as well as making available to other states local material that might be found applicable across state lines. A good example of this is the fact that the South Carolina posters and the short movie film made in South Carolina entitled "By Our Own Hand" are now in use in several of the southern states. South Carolina in turn has used some materials developed by Texas and Florida.

## TRAINING

The past year has seen a marked increase in appreciation of the place that every employee of the Forestry Commission has in doing the education job. Because the Forestry Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has paid untold benefits and has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective, talks and slide lectures in all phases of our work are more interesting and to the point. During district fire control training meetings, district and county unit personnel are trained to make the most effective use of materials they have to work with. This past year a great deal of time and training was spent on the new fire prevention plan and the new slide projectors which would be in use in every county. Stress was laid on the fact that the forest fire prevention program and an expanded forest management program depended on the effectiveness of the selling job of each member of the organization in his respective community.

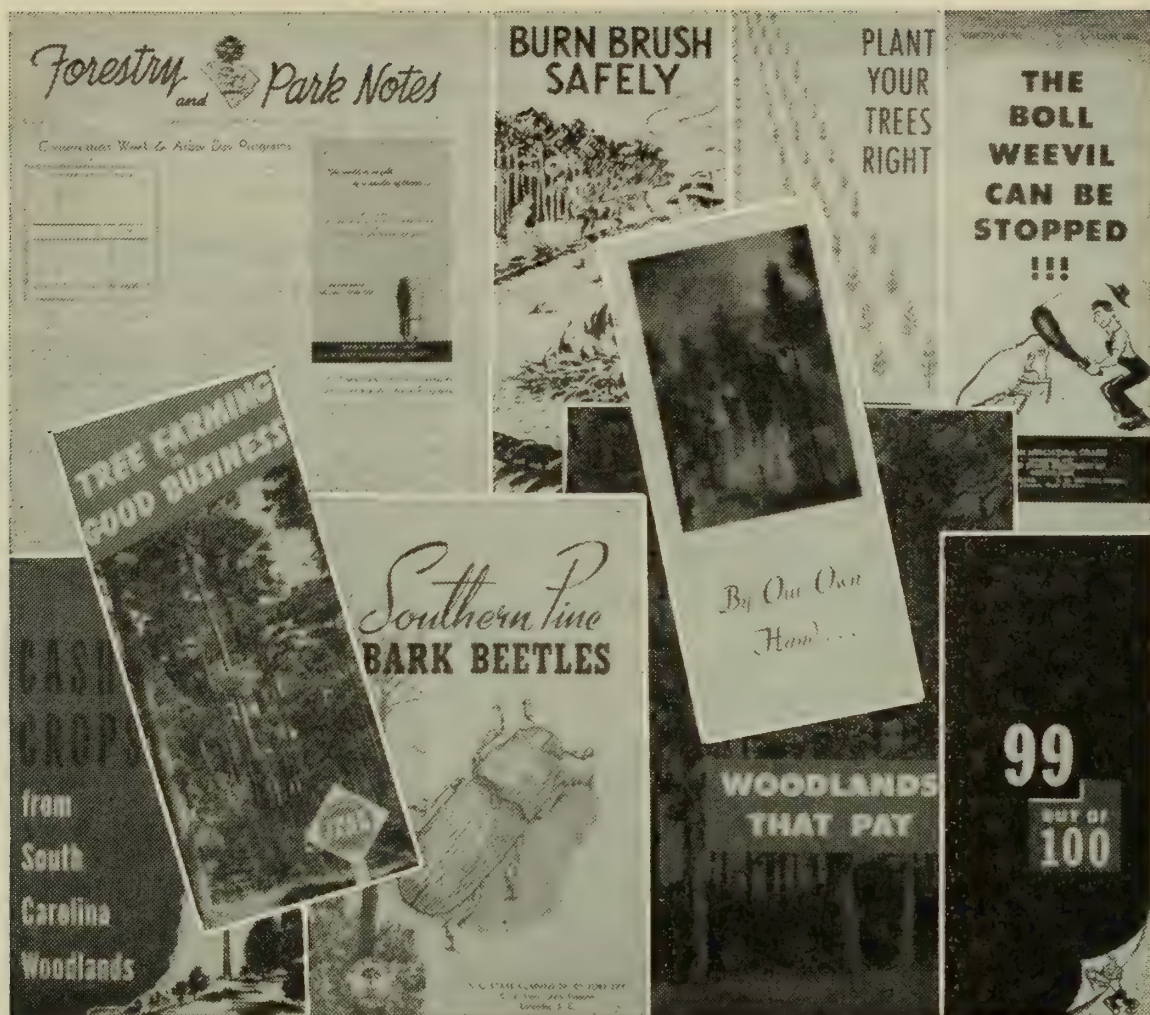
The training of the Commission's technical foresters included a 4-day forest management training school held at Burnt Gin Group Camp on Manchester State Forest. Training at this meeting included methods of managing and harvesting hardwood stands, control of undesirable species, and the relationship of soil type to timber management. Commission foresters are encouraged to attend meetings of the Society of American Foresters, and to keep abreast of the latest research and technical developments so that they can render the highest type of technical forestry service to landowners.

The in-service training program of the Division of State Parks included attendance by a number of employees at the annual short course in state park administration held each year at North Carolina State College. In addition, all State Park Superintendents attended a 3-day training meeting during the year, at which various phases of state park administration, operation, maintenance and public relations were covered.

## PUBLICATIONS AND POSTERS

Requests for information on forestry and state parks are received daily from individuals, organizations and agencies. Up-





Some of the more recent of the publications produced by the Commission in its 25-years of service.

to-date printed materials often serve to answer these requests. During the year more than 35,000 pieces of material on forestry and state parks were distributed from the Columbia office alone in answer to requests.

Printed materials are also distributed at schools, county fairs, etc. to explain various forestry and state park activities.

The Information and Education branch each year prepares publications such as leaflets, booklets and folders. During the year several new publications were prepared.

“The World is so Full of a Number of Things”, a 32-page teachers’ manual was prepared for use with the Ranger Parks series of radio programs.

The Conservation Week and Arbor Day issue of “Forestry and Park Notes”, a 4-page illustrated issue, was prepared during the year.

The "Annual Report of the State Commission of Forestry 1950-51", a 112-page report, was issued during the year summarizing the accomplishments of the Commission during the year.

Because only limited funds for printing posters and publications were available, the Information and Education Branch intensified its efforts to have pictures and articles printed by newspapers, magazines, etc., where little cost to the Commission was involved. A large number of such items appeared during the year.

An example, is the photograph of the hand behind the little pine tree which was taken originally for use in one of the Commission's exhibits. This photograph has probably become one of the most widely used photograph in the history of American forestry. It has appeared on the front cover of several leading forestry periodicals such as the Forest Farmer and the Southern Lumberman, on the cover of the State Magazine, in numerous articles, and on the cover of The Southern Pine Story. The Southern Pine Association printed 300,000 copies of this publication and it will be widely distributed. The West Virginia Pulp and Paper Company plans to reproduce this same picture on the back of playing cards which will be distributed by the company along with a fire prevention message.

The Information and Education office maintains a library of leaflets, bulletins, and other materials on forestry, much of which is furnished without charge by the U. S. Forest Service, Southern Pulpwood Conservation Association, and other organizations and agencies. American Forest Products Industries, Incorporated, has furnished much material for distribution. During the year more than 29,000 pieces of AFPI material alone were distributed.

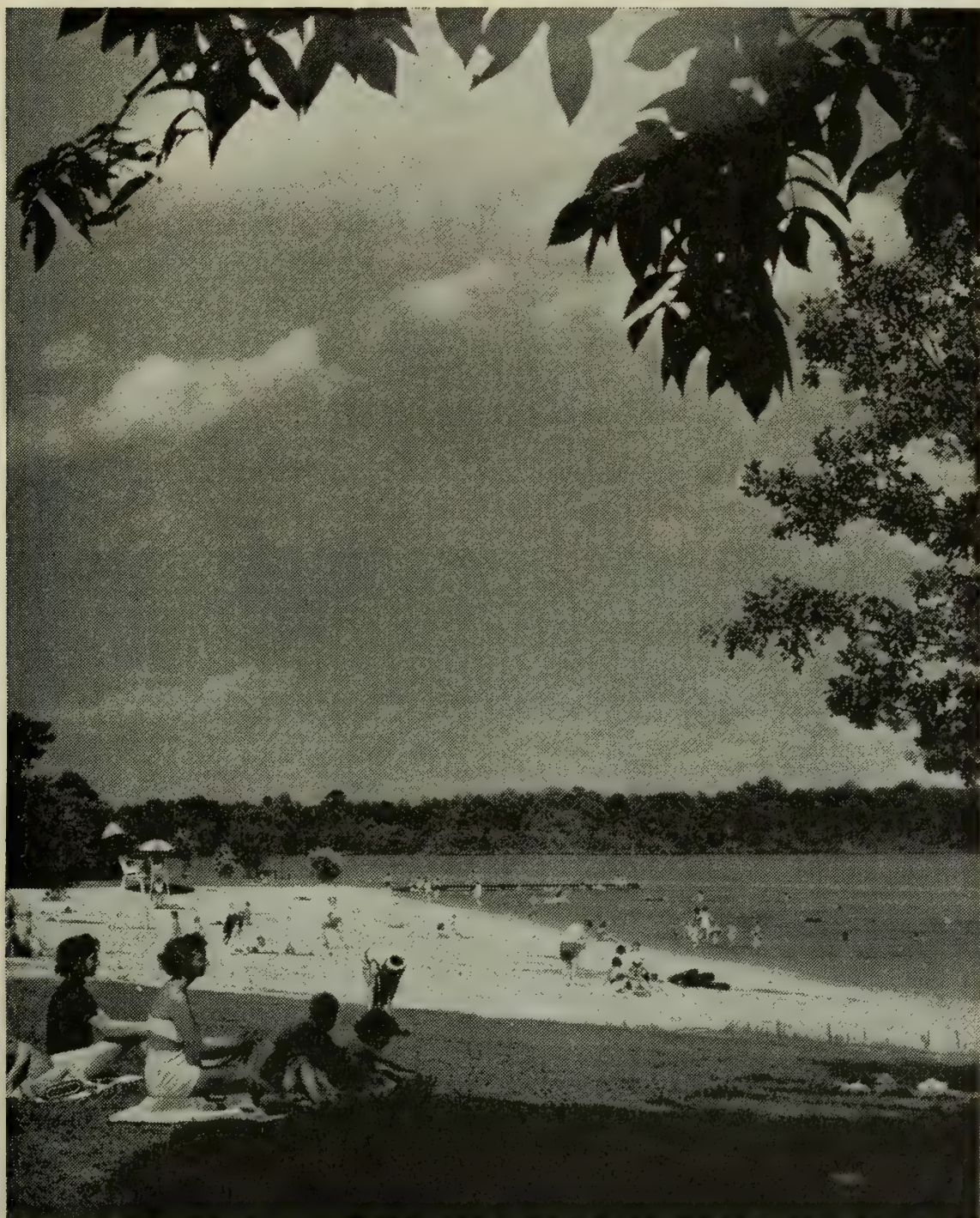
Three new fire prevention posters were published last year. One was directed primarily to school children, a second to landowners, and a third primarily to the law breaker. A total of 15,000 of these were distributed.

The Commission again cooperated with the School Book Commission in placing a forestry and state parks message on one million school book covers that were distributed during the year.



## NEWS RELEASES AND ARTICLES

News papers and magazines accepted and used material prepared by personnel of the Commission more readily than ever before. This is largely due to the constant effort to furnish better quality work for the editors. The material is also more acceptable to the readers because it is more readable and more



One of the important functions of the Information & Education branch is to provide photographs of park recreational facilities, and other activities of the Commission for use in publications, news articles and features that inform the public of the recreational and economic opportunities derived from the woodlands of South Carolina.



interesting. This improvement is due primarily to Information and Education training.

During the year Commission personnel prepared 889 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during fire situations, news items would be given orally to individual papers and to the wire services.

In addition to news releases, several feature articles on various phases of state parks and forestry were prepared. Pictures or prepared mats illustrating the story were usually sent with the feature.

Forestry Commission personnel in every county of the state prepared news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors. The excellent press coverage has helped place forestry and state park news before the people more prominently than ever before.

### BOYS' FORESTRY CAMP

The fifth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 20-25. Seventy-



Measuring the diameter of a tree to compute its volume and value is one of the things taught at Boys' Forestry Camp.



three young men representing every county in the state attended the week-long camp. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject "Why I Would Like To Attend Boys' Forestry Camp." On invitation of the Commission, 20 FFA boys were selected by the Vocational Agriculture Section of the Division of Vocational Education, State Department of Education, on the basis of forestry activity in FFA chapters in the state. In the same manner 20 more were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

### **SIGN AND WOODWORKING SHOP**

The Commission's sign and woodworking shop continued to produce routed letter signs, picnic chairs and tables, fair exhibits, and other necessary cabinet and carpentry work. This work benefitted forestry greatly during the year. The distinctive routed letter signs identified the various Forestry and State Park installations with the Commission of Forestry. The Commission's fair exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

### **SOUTH CAROLINA TREE FARMS SYSTEM**

The South Carolina Tree Farms System was set up to recognize the many deserving landowners who practice good forestry. To become a Tree Farmer a landowner must prevent woods fires and take all reasonable precautions against them. In addition, he must apply sound cutting practices to existing timber and must plant areas that will not reseed naturally. After a Tree Farmer is certified, his property is marked with a Tree Farm sign. His neighbor and people passing by may see good forestry practices and come to understand forest values. Tree farms are also effective places to hold demonstrations on all phases of forestry.

The Tree Farm movement is sponsored in South Carolina by the State Commission of Forestry and the Clemson College Extension Service, with financial assistance from the Southern Pine Association, and is encouraged nationally by American Forest Products Industries Inc.

Before a landowner can be certified as a Tree Farmer, his application must pass the County Tree Farm Committee which is made up of the District Forester, County Agent, and a member appointed by the Commission's County Forestry Board. After clearing this committee, the application goes to the State Committee which takes final action. This committee is made up of prominent citizens of the state interested in the advancement of forestry. They are: James H. Graham, Charleston; C. P. Key, Lodge; Oswald Lightsey, Miley; Director D. W. Watkins, Clemson; S. B. Huff, Piedmont; and State Forester C. H. Flory, Columbia. Assistant State Forester John C. Witherspoon is Secretary of the State Committee.

There are now 88 Tree Farms in the state comprising 1,080,494 acres. The following landowners qualified under the South Carolina Tree Farms System this year:

Name	County	Acreage
C. A. Harper .....	Hampton .....	4,000
Bruce Harter .....	Allendale .....	450
Dunbar Oswald .....	Allendale .....	700
Guy V. Whitener .....	Laurens, Lexington and Newberry .....	1,847
Ben Alderman .....	Clarendon .....	1,680
G. T. Floyd .....	Clarendon .....	445
G. M. Bagnel .....	Clarendon .....	40
M. Earl Stone .....	Saluda .....	194
F. M. & M. S. Dwight .....	Richland .....	144
Olin J. Kinsler .....	Richland .....	205
A. J. Lever .....	Richland .....	112
International Paper Company .....	Abbeville, Edgefield, Greenwood, McCormick and Saluda .....	29,332
J. D. Peeples .....	Hampton .....	308
Kendall Mills-Wateree Division .....	Kershaw .....	450
James L. Sweet .....	Kershaw .....	600
H. Gates & Richard W. Lloyd .....	Kershaw .....	2,854
R. W. Lloyd & Henry Savage, Jr. ....	Kershaw .....	1,370
Cypress Woods Corp .....	Jasper .....	20,000
Brooks B. Weber .....	Union .....	800
Holliday Brothers .....	Horry .....	2,000
TOTAL .....		67,531

## ADMINISTRATION

The Commission's Administrative Branch is responsible for coordinating the activities of both Central and Field Offices on Fiscal and Accounting, Property and Supply, and Personnel and Office Services.

The Commission of Forestry spent \$1,581,472.07 on all phases of Forestry and Park activities during the year. (See financial sheet for detailed explanation of funds available and expenditures made). Of the total funds expended by the Division of Forestry only seventy-two per cent (72%) was provided by state appropriated funds.



During the year all regular employees of the Commission began receiving salary checks twice monthly.

All Commission owned tools and equipment were inventoried during the year. Property records were revamped and brought up to date in both Central and Field Offices. The estimated value of the tools and equipment owned by the Commission is \$782,477. The Commission also has real property and improvements estimated to be worth \$66,095,228.00.

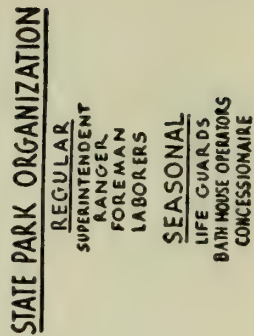
The purchase of supplies, tools, and equipment for the Commission, where possible and feasible, are obtained on a bid basis. During the year 1,489 requisitions for supplies and equipment were received and 1,723 purchase orders issued.

Personnel employed by the Commission continued to resign to accept better salaries. Nineteen per cent (19%) of the total personnel resigned during the year. The largest per cent of the total were County Unit Personnel; however, the turn-over of technical employees, foresters who assist landowners with timber management problems continued very high.

One clerk position in the Central Office was eliminated during the year.

Various administrative policies, forms and procedures were revised and improved during the year resulting in more efficiency and better working conditions in both Central and Field Offices.

# ORGANIZATION CHART





## APPENDIX

## FINANCIAL STATEMENT

## SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1951 - June 30, 1952

## RECEIPTS

## Division of Forestry:

Balance from 1950-51—Federal Fund ---	4.28	
Balance from 1950-51—More		
Trees Program -----	1,421.97	
Balance from 1950-51—Radio Com. Fund	135.72	
State Appropriation — Operating -----	865,950.00	
Federal Funds—Protection CM		
Law Sec. 2 -----	298,754.00	
Federal Funds—Reforestation CM		
Law Sec. 4 & N-D -----	10,096.00	
Federal Funds—Cooperative		
Farm Management -----	15,051.16	
Nursery -----	31,231.10	
State Forests -----	34,427.45	
Marking and Tallying Timber -----	10,720.02	
Counties & Timber Firms -----	7,381.63	
Miscellaneous -----	24.77	
Dunbarton Tower Site -----	11,336.00	
Radio Communication Project -----	14,021.29	
<hr/>		
Total Receipts—Forestry -----		\$1,300,555.39
Less Receipts Deposited to Cr. State		
Revenue Account -----		76,403.34
<hr/>		
Total Receipts Available for		
Expenditures -----		1,224,152.05
Total Expenditures -----		1,223,396.88
<hr/>		
Balance—Division of Forestry -----		755.17*

## Division of State Parks:

Balance from 1950-51—Hunting	
Island Deposits -----	1,868.21
Balance from 1950-51—Myrtle Beach	
Fishing Pier -----	13.54
State Appropriation—Operating -----	425,049.17
State Appropriation—Historical Areas -----	3,350.83
Forests & Parks Fund—Hunting	
Island Deposits -----	2,870.00
Myrtle Beach Fishing Pier -----	33,767.18

Cheraw Park—Sale Fire	
Damaged Timber .....	19,121.54
Cabin Rentals .....	19,054.55
Concession Stands .....	4,315.92
Bathhouse Receipts .....	40,299.69
Boat Rentals .....	3,248.35
Group Camps .....	8,783.94
Picnic Shelters & Recreational Bldgs. ....	1,529.00
Miscellaneous Receipts .....	814.00
<hr/>	
Total Receipts—Parks .....	564,085.92
Less Receipts Deposited to Cr. State	
Revenue Account .....	78,045.45
<hr/>	
Total Receipts Available for	
Expenditures .....	486,040.47
Total Expenditures .....	414,414.13
<hr/>	
Balance—Division of State Parks .....	71,626.34**

## EXPENDITURES

Administrative and Technical .....	\$ 320,193.74
State Forest Nursery .....	59,288.87
State Forest Projects .....	40,654.10
Fire Protection .....	803,260.17
<hr/>	
Total—Division of Forestry .....	\$1,223,396.88
Total—Division of State Parks .....	414,414.13
<hr/>	
Grand Total—Expenditures .....	1,637,811.01

## RECAPITULATION

## Funds Available:

Division of Forestry .....	1,224,152.05
Division of State Parks .....	486,040.47
<hr/>	
	1,710,192.52

## Expenditures:

Division of Forestry .....	1,223,396.88
Division of State Parks .....	414,414.13
<hr/>	
	-1,637,811.01
<hr/>	
Balance .....	72,381.51*-**



* Forestry: Federal Fund .....	16.81
Radio Com. Fund .....	738.36
**Parks: Appro.—Ear-marked	
for Col. Park .....	50,000.00
Hunting Island Deposits ---	2,296.81
M. B. Fishing Pier .....	604.83
Cheraw Park—Fire Dmgd.	
Timber .....	18,724.70
	<hr/>
	\$72,381.51

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1951-52

UNIT	Organized Personnel							Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Members, Retainer Crews	Members, Flexible Crews	Total	Volunteer, FFSS Crews	Other Volunteers	
Abbeville .....	1	2	..	1	..	2	6	210	161	377
Aiken .....	1	4	2	5	..	10	22	8	494	524
Allendale .....	1	2	1	3	..	4	11	18	98	127
Anderson .....	1	2	..	3	..	3	9	100	145	254
Bamberg .....	1	2	1	2	..	4	10	70	283	363
Barnwell .....	1	2	1	2	..	..	6	34	376	416
Beaufort .....	2	2	1	3	..	..	8	..	140	148
Berkeley .....	1	4	1	4	..	..	10	21	718	749
Calhoun .....	1	2	1	2	..	2	8	10	104	122
Charleston .....	1	4	1	2	..	4	12	9	229	250
Cherokee .....	1	1	..	1	..	3	6	176	286	468
Chester .....	1	3	..	1	..	3	8	53	405	466
Chesterfield .....	1	3	1	4	..	2	11	45	191	247
Clarendon .....	1	3	1	3	..	6	14	15	292	321
Colleton .....	1	4	2	5	..	4	16	34	420	470
Darlington .....	1	2	..	3	..	13	19	23	721	763
Dillon .....	1	2	1	2	..	2	8	8	355	371
Dorchester .....	1	3	1	3	..	3	11	6	119	136
Edgefield .....	1	2	1	1	..	1	5	132	212	349
Fairfield .....	1	4	..	3	32	..	40	42	396	478
Florence .....	1	4	1	4	..	2	12	34	744	790
Georgetown .....	1	4	2	4	3	7	21	13	348	382
Greenville .....	1	3	..	4	..	7	15	102	507	624
Greenwood .....	1	2	..	2	..	3	8	125	337	470
Hampton .....	1	3	1	3	..	1	9	14	203	226
Horry .....	1	5	2	4	..	1	13	1	1,006	1,020
Jasper .....	1	3	1	2	..	..	7	6	145	158
Kershaw .....	1	3	2	6	..	5	17	45	389	451
Lancaster .....	1	3	..	2	..	..	6	21	272	299
Laurens .....	1	3	..	2	..	3	9	108	142	259
Lee .....	1	2	1	3	..	3	10	30	226	266
Lexington .....	1	3	1	5	..	3	13	12	952	977
Marion .....	1	3	1	3	..	6	14	22	323	359
Marlboro .....	1	3	1	3	..	5	13	30	386	429
McCormick .....	1	1	..	..	..	1	3	55	138	196
Newberry .....	1	2	..	2	..	3	8	74	341	423
Oconee .....	1	2	..	3	..	6	12	27	182	221
Orangeburg .....	1	5	2	5	..	5	18	40	897	955
Pickens .....	1	3	..	4	..	5	13	9	104	126
Richland .....	1	5	1	4	..	3	14	42	520	576
Saluda .....	1	2	1	1	..	2	6	46	320	372
Spartanburg .....	1	3	..	4	..	6	14	15	102	131
Sumter .....	1	3	1	3	..	3	11	25	340	376
Union .....	1	2	..	1	..	10	14	13	165	192
Williamsburg .....	1	5	1	4	..	3	14	142	940	1,096
York .....	1	2	..	4	..	8	15	152	440	607
TOTALS .....	47	132	35	135	35	167	549	2,217	16,614	19,380



TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1951-JUNE 30, 1952

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	163	3.3	2,818.1	17.3
August .....	89	1.8	924.7	10.4
September .....	67	1.3	299.6	4.5
October .....	145	2.9	1,452.9	10.0
November .....	196	3.9	2,466.4	12.6
December .....	315	6.3	4,221.6	13.4
January .....	1,235	24.8	30,343.1	24.6
February .....	923	18.5	32,776.8	35.5
March .....	746	15.0	11,860.0	15.9
April .....	771	15.5	17,787.2	23.1
May .....	205	4.1	2,376.6	11.6
June .....	127	2.6	1,123.1	8.9
TOTALS .....	4,982	100.0	108,450.1	21.8

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1951-52

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	1	2.0	..	7.8	7	84.1	4	91.0	3	12.8	..	..	..	..	1	0.8	18	198.5
Aiken	7	40.9	4	23.0	46	1389.7	31	2737.6	50	1823.1	5	6.3	38	854.8	38	854.8	185	6896.4
Allendale	..	..	8	18.5	34	160.0	37	444.1	27	866.5	2	6.0	2	6.0	2	63.0	113	1576.1
Anderson	1	5.5	..	..	15	80.7	11	167.7	2	6.0	..	..	..	..	1	10.0	32	275.9
Bamberg	..	..	..	..	21	279.0	44	503.9	31	691.7	1	10.0	13	521.0	13	521.0	112	2007.8
Barnwell	..	..	2	2.2	74	751.2	14	56.4	..	..	..	..	..	..	2	1.3	103	925.9
Beaufort	1	4.5	5	858.5	11	72.4	6	35.2	53	1385.0	..	..	..	..	3	12.9	79	2368.5
Berkeley	2	82.1	4	11.3	14	84.8	7	68.4	255	3531.1	2	20.0	2	20.0	21	411.7	305	4209.4
Calhoun	1	21.0	7	40.3	27	190.2	2	18.5	17	884.6	..	..	..	..	1	1.8	59	1195.8
Charleston	..	..	4	250.0	17	360.4	16	279.7	50	738.8	5	59.5	2	121.2	2	121.2	95	1873.6
Cherokee	..	..	1	64.0	17	770.0	7	133.0	6	25.5	..	..	..	..	3	4.0	44	1003.5
Chester	1	5.0	3	248.0	16	40.9	13	197.0	1	5.0	..	..	3	52.0	10	104.5	54	723.4
Chesterfield	9	236.0	3	71.0	9	56.2	18	429.0	20	164.8	..	..	..	..	7	261.0	66	4957.0
Clarendon	..	..	5	67.2	19	398.7	12	35.6	129	2906.5	..	..	..	..	3	12.0	175	3448.2
Colleton	2	22.0	..	..	17	165.6	42	547.9	44	604.2	2	7.9	3	15.1	3	15.1	112	1362.9
Darlington	..	..	14	191.8	55	486.7	37	425.7	..	..	..	..	3	3.4	9	151.7	118	1259.3
Dillon	..	..	2	0.6	28	263.7	22	187.6	27	310.9	..	..	7	705.0	3	629.0	96	2268.1
Dorchester	..	..	1	8.0	10	62.6	21	269.0	16	391.0	..	..	3	22.0	4	70.0	55	822.6
Edgefield	4	11.1	..	..	17	400.9	8	83.9	2	5.5	..	..	..	..	2	9.0	33	510.4
Fairfield	1	3.0	4	45.0	24	161.1	9	37.5	7	582.0	..	..	5	34.2	10	41.0	69	952.6
Florence	1	3.3	1	1.4	62	1105.9	102	2929.5	119	4405.9	..	..	3	29.6	6	32.8	296	8524.0
Georgetown	6	143.0	1	13.0	6	29.7	9	223.0	104	1182.3	..	..	4	474.8	16	474.8	147	2354.8
Greenville	2	2.4	4	16.5	59	224.5	29	178.7	24	660.2	..	..	1	9.6	28	79.9	151	1176.8
Greenwood	1	0.2	1	2.0	20	111.7	15	141.5	6	52.1	..	..	1	11.7	7	60.5	52	389.2
Hampton	..	..	..	6.0	8	22.3	4	47.8	34	575.3	..	..	..	..	5	21.0	52	672.4
Horry	2	7.0	1	55.0	90	1686.8	86	3425.3	147	7004.8	..	..	7	53.5	54	3079.1	387	15311.5
Jasper	5	30.4	4	123.3	3	32.6	8	51.1	38	384.6	..	..	1	14.0	2	66.8	61	702.8
Kershaw	5	65.5	15	109.8	21	96.2	13	319.5	15	700.5	..	..	..	..	13	304.0	84	1710.5
Lancaster	..	..	6	18.2	21	168.1	18	135.7	15	352.8	..	..	1	1.0	3	11.4	64	687.2
Laurens	..	..	1	2.0	16	191.2	5	12.5	..	..	..	..	..	..	2	3.6	24	209.3
Lee	..	..	1	25.0	13	454.0	11	182.1	..	..	..	..	2	79.0	5	163.0	47	1324.6
Lexington	4	39.1	8	66.3	28	409.8	31	462.7	19	816.7	..	..	..	..	7	111.1	105	2170.7
Marion	1	0.1	2	25.0	25	330.5	19	425.0	28	623.7	..	..	6	27.2	5	20.4	90	1524.8
Marlboro	..	..	5	349.6	9	31.9	25	382.3	57	1616.5	..	..	1	5.1	10	193.4	107	2578.8



McCormick	1	5.0	1	4.9	2	55.0	13	290.9	5	32.5	..	2	3.7	..	24	392.0
Newberry	2	1.6	5	380.5	1	4.0	11	38.0	6	34.0	..	3	..	8.0	29	724.3
Oconee	..	..	6	5.9	..	..	5	44.5	27	181.9	2	..	4.3	111.5	47	385.9
Orangeburg	1	10.0	..	259.0	..	64.0	23	263.8	22	577.8	463	7	65.7	45.1	531	17778.8
Pickens	2	6.0	..	..	1	1.5	11	19.4	12	15.4	1	..	..	14.3	34	56.9
Richland	..	..	7	22.4	1	6.3	92	1240.0	34	559.4	68	..	29.0	59.0	211	2874.8
Saluda	1	13.2	1	24.5	1	23.5	21	125.6	9	267.0	6	1	1.4	6.8	32	511.2
Spartanburg	..	..	3	13.0	1	15.0	11	142.0	6	52.3	2	1	28.2	73.5	39	342.5
Sumter	1	3.0	1	2.0	3	36.0	18	186.5	9	136.6	46	2	16.0	39.3	88	979.4
Union	6	20.9	1	15.0	1	52.0	9	58.6	7	28.5	1	1	4.8	61.5	33	243.3
Williamsburg	2	24.0	3	5.1	5	138.1	22	978.3	70	1152.5	95	4	57.0	218.1	206	5272.2
York	..	..	11	57.9	1	9.0	48	356.1	30	154.5	16	4	16.5	34.4	118	715.5
TOTALS	73	807.8	156	1938.8	115	3010.8	1142	14897.8	973	22658.8	2063	100	1650.8	8589.1	4982	108450.1

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1951-52

UNIT	Class A (Under 1/4 acre)		Class B (1/4 to 10 acres)		Class C (11 to 100 acres)		Class D (101-500 acres)		Class E (over 500 acres)		Total Number	Percent of Total Number
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Abbeville	..	..	14	0.5	4	0.3	..	..	..	..	18	0.4
Aiken	10	2.6	133	4.5	33	2.3	5	2.7	4	25.0	185	3.7
Allendale	2	0.5	94	3.1	14	1.0	3	1.6	..	..	113	2.3
Anderson	..	..	24	0.8	8	0.5	..	..	..	..	32	0.6
Bamberg	3	0.8	75	2.5	28	1.9	6	3.2	..	..	112	2.2
Barnwell	4	1.1	79	2.6	19	1.3	1	0.5	..	..	103	2.1
Beaufort	5	1.3	46	1.5	25	1.7	2	1.1	1	6.3	79	1.6
Berkeley	42	11.2	174	5.9	84	5.9	5	2.7	..	..	305	6.1
Calhoun	7	1.9	35	1.2	14	1.0	2	1.1	1	6.3	59	1.2
Charleston	4	1.1	61	2.1	25	1.7	5	2.7	..	..	95	1.9
Cherokee	5	1.3	26	0.9	11	0.8	2	1.1	..	..	44	0.9
Chester	2	0.5	40	1.3	10	0.7	2	1.1	..	..	54	1.1
Chesterfield	6	1.6	36	1.2	21	1.5	2	1.1	1	6.2	66	1.3
Clarendon	19	5.1	102	3.4	47	3.3	6	3.2	1	6.2	175	3.5
Colleton	10	2.7	74	2.5	27	1.9	1	0.5	..	..	112	2.3
Darlington	12	3.2	73	2.5	31	2.2	2	1.1	..	..	118	2.4
Dillon	12	3.2	55	1.8	25	1.7	3	1.6	1	6.2	96	1.9
Dorchester	..	..	36	1.2	18	1.3	1	0.5	..	..	55	1.1
Edgefield	2	0.5	26	0.9	4	0.3	1	0.5	..	..	33	0.7
Fairfield	2	0.5	50	1.7	16	1.1	1	0.5	..	..	69	1.4
Florence	15	4.0	133	4.5	126	8.8	22	11.8	..	..	296	5.9
Georgetown	18	4.8	72	2.4	54	3.8	3	1.6	..	..	147	3.0
Greenville	37	9.8	100	3.4	13	0.9	..	..	1	6.3	151	3.0
Greenwood	6	1.6	36	1.2	10	0.7	..	..	..	..	52	1.0
Hampton	5	1.3	38	1.3	8	0.6	1	0.5	..	..	52	1.0
Horry	40	10.6	150	5.0	162	11.3	33	17.7	2	12.5	387	7.8
Jasper	6	1.6	32	1.1	23	1.6	..	..	..	..	61	1.2
Kershaw	6	1.6	52	1.7	23	1.6	3	1.6	..	..	84	1.7
Lancaster	3	0.8	53	0.7	6	0.4	2	1.1	..	..	64	1.3
Laurens	..	..	20	0.7	4	0.3	..	..	..	..	24	0.5
Lee	..	..	16	0.5	30	2.1	1	0.5	..	..	47	0.9
Lexington	8	2.1	72	2.4	18	1.3	7	3.7	..	..	105	2.1



Marion .....	6	1.6	67	2.3	13	0.9	4	2.1	..	..	90	1.8
Marlboro .....	8	2.1	60	2.0	33	2.3	6	3.2	..	..	107	2.1
McCormick .....	..	..	17	0.6	6	0.4	1	0.5	..	..	24	0.5
Newberry .....	2	0.5	18	0.6	7	0.5	2	1.1	..	..	29	0.6
Oconee .....	2	0.5	36	1.2	9	0.6	..	..	..	..	47	0.9
Orangeburg .....	1	0.3	255	8.6	240	16.8	32	17.1	3	18.7	531	10.7
Pickens .....	8	2.1	25	0.8	1	0.1	..	..	..	..	34	0.7
Richland .....	10	2.7	145	4.9	53	3.7	3	1.6	..	..	211	4.2
Saluda .....	1	0.3	23	0.8	6	0.4	2	1.1	..	..	32	0.6
Spartanburg .....	..	..	30	1.0	9	0.6	..	..	..	..	39	0.8
Sumter .....	..	..	61	2.1	27	1.9	..	..	..	..	88	1.8
Union .....	..	..	27	0.9	6	0.4	..	..	..	..	33	0.7
Williamsburg .....	33	8.8	96	3.2	61	4.3	15	8.0	1	6.3	206	4.1
York .....	14	3.8	86	2.9	18	1.3	..	..	..	..	118	2.4
TOTALS .....	376	100.0	2973	100.0	1430	100.0	187	100.0	16	100.0	4982	100.0

TABLE 5—SUMMARY OF FIRES BY COUNTIES AND MONTHS—FISCAL YEAR 1951-52

UNIT	July 1951		Aug. 1951		Sept. 1951		Oct. 1951		Nov. 1951		Dec. 1951		Jan. 1952		Feb. 1952		March 1952		April 1952		May 1952		June 1952	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	..	..	2	43.2	1	0.8	..	..	..	..	..	..	..	..	5	104.4	..	..	4	21.1	3	9.2	3	19.8
Aiken	12	48.5	7	37.4	9	19.3	..	19.0	13	54.8	10	57.6	16	178.0	38	5279.9	26	510.4	33	617.0	11	60.7	5	13.8
Allendale	3	11.3	..	..	1	3.0	..	12.0	4	66.4	9	44.0	33	486.1	20	473.0	27	442.3	7	20.0	4	17.5	1	0.5
Anderson	..	..	..	..	..	..	..	3.8	1	1.0	12	184.5	43	893.6	6	121.0	7	37.7	10	91.9	4	14.6	2	5.9
Bamberg	1	3.0	..	..	..	..	..	66.0	1	1.0	..	..	..	..	31	751.0	12	59.7	8	49.0	..	..	..	..
Barnwell	2	12.0	..	..	1	2.0	..	10.0	5	23.3	8	51.1	25	218.0	31	411.4	11	68.1	11	107.0	5	23.0	..	..
Beaufort	3	887.1	4	14.2	..	..	..	..	1	1.0	5	90.8	17	119.4	11	170.7	16	536.4	19	528.2	1	15.0	2	5.7
Berkeley	3	7.1	2	2.0	..	..	..	..	5	71.2	37	440.0	93	1133.3	58	1548.3	60	639.1	35	313.7	10	53.4	2	1.3
Calhoun	1	21.0	..	13.8	1	2.0	..	1.8	3	6.3	1	0.6	17	275.1	17	791.2	5	30.0	7	53.7	1	0.8	2	1.5
Charleston	3	22.0	..	..	..	..	..	4.5	4	21.8	5	27.3	30	517.3	8	95.7	20	496.5	18	670.3	3	15.6	1	0.6
Cherokee	1	3.0	..	..	..	..	..	..	1	0.5	1	0.5	11	58.5	5	516.0	13	265.0	9	135.0	1	15.0	2	10.0
Chester	9	98.5	1	3.0	2	10.0	..	7.0	1	0.5	1	0.1	4	39.5	7	63.5	9	144.0	12	348.4	1	0.4	3	8.5
Chesterfield	3	45.0	3	142.0	..	..	..	0.1	2	43.0	..	..	8	84.2	14	210.6	10	240.1	15	4081.0	5	30.0	5	81.0
Clarendon	..	..	..	..	..	..	..	10.1	4	5.6	21	100.2	87	1615.9	30	1264.0	17	281.3	11	165.0	..	..	..	..
Colleton	7	105.6	..	4.2	..	..	..	2.0	3	34.0	5	24.0	22	274.8	18	193.4	29	317.2	16	355.7	6	51.0	1	1.0
Darlington	2	2.8	1	0.3	..	..	..	2.6	8	37.6	11	115.1	26	401.8	27	352.8	8	21.2	25	256.8	7	51.3	1	17.0
Dillon	3	24.5	6	203.1	..	..	..	2.6	7	73.2	4	4.2	14	126.1	15	714.8	19	277.5	17	717.2	9	117.5	2	10.0
Dorchester	3	47.0	1	1.0	..	..	..	3.0	..	..	7	67.0	24	331.6	2	28.0	10	266.0	5	41.0	1	24.0	1	14.0
Edgefield	2	10.0	1	2.1	4	8.6	..	..	..	..	..	..	..	..	5	13.7	3	5.7	6	366.6	3	3.2	9	100.5
Fairfield	2	33.0	3	10.4	4	7.7	..	99.0	4	13.8	2	11.0	7	32.2	10	550.0	7	47.0	15	120.5	4	25.0	1	3.0
Florence	3	23.0	2	13.0	..	..	..	42.2	17	162.8	29	595.1	100	3491.6	57	1893.0	41	879.6	29	1281.8	7	24.7	6	117.2
Georgetown	5	64.4	2	26.5	1	1.0	..	74.4	9	119.6	9	174.6	32	668.5	16	220.2	22	273.8	21	373.4	10	213.0	9	145.4
Greenville	1	0.1	3	0.6	1	0.6	..	10.1	5	25.7	4	3.0	12	14.0	32	130.0	33	109.7	40	872.9	9	8.6	3	1.5
Greenwood	2	11.9	3	15.1	6	8.8	..	3.7	2	5.1	1	0.2	6	67.9	10	60.5	5	39.2	12	74.2	1	78.4	2	24.2
Hampton	1	1.5	..	..	1	5.0	..	14.0	5	16.6	3	5.2	16	139.1	2	28.0	15	442.0	5	11.0	1	4.0	1	6.0
Horry	12	193.8	5	57.3	1	26.0	..	127.9	17	359.2	23	464.2	94	4156.6	55	4874.2	50	1605.3	74	2322.2	35	1059.6	12	65.2
Jasper	5	123.7	1	14.0	1	11.0	..	1.0	..	..	5	23.0	8	103.0	5	16.9	24	257.6	7	110.0	3	13.5	4	30.1
Kershaw	7	163.5	3	40.0	2	4.0	..	16.1	3	11.5	..	15.8	13	250.7	14	508.2	17	434.2	12	242.0	2	17.0	4	20.5
Lancaster	3	1.7	..	..	..	..	..	..	..	..	..	..	6	15.3	10	388.4	13	80.3	20	159.3	1	6.0	3	8.6
Laurens	..	..	4	5.3	2	63.6	..	..	..	..	..	..	3	3.5	7	74.5	2	12.1	6	44.9	2	2.3	1	1.5
Lee	..	..	..	..	..	..	..	46.0	4	131.5	4	37.5	13	562.6	7	182.0	7	128.0	10	237.0	..	..	..	..
Lexington	5	32.0	..	6.2	..	2.0	..	10.0	5	34.1	4	4.0	16	71.5	24	972.5	12	288.1	20	604.6	6	28.6	6	117.1
Marion	6	259.0	1	1.0	..	..	..	354.4	6	38.4	11	252.3	25	238.1	6	68.2	5	38.0	11	103.1	3	5.9	5	166.4
Marlboro	1	1.2	..	..	4	11.8	..	..	9	468.9	3	98.0	25	204.0	23	1043.5	17	218.8	21	528.1	2	1.7	2	2.8
McCormick	1	0.7	3	60.0	3	25.5	..	25.0	..	..	..	..	4	149.0	2	87.5	1	4.9	3	14.4	3	19.0	2	6.0



Newberry	2	14.5	3	8.5	3	2.0	1	4.0	..	..	1	0.2	4	27.5	8	646.5	..	..	5	19.5	..	..	2	1.6
Oconee	2	2.2	1	1.8	1	2.4	1	0.8	..	..	..	731.5	2	33.0	13	109.4	76	131.6	18	101.4	1	1.5	1	1.8
Orangeburg	8	119.3	1	1.6	5	34.0	1	41.8	..	181.9	33	..	190	10507.2	157	4856.2	76	721.5	48	564.9	3	8.9	1	10.0
Pickens	2	7.5	..	..	1	..	1	0.4	1	1.5	2	0.3	2	1.3	7	5.8	4	22.1	10	11.5	5	6.5	..	..
Richland	11	239.7	9	112.1	6	11.8	6	46.8	13	95.5	17	102.3	49	556.5	30	719.0	22	607.0	28	208.9	14	165.5	6	9.7
Saluda	..	..	..	..	1	1.3	1	9.2	2	33.3	1	5.0	2	2.7	11	371.8	1	2.0	5	38.1	2	24.3	3	23.5
Spartanburg	1	28.2	2	11.0	1	0.3	2	4.0	..	..	1	1.2	4	18.0	11	159.8	4	44.5	11	70.5	2	5.0	..	..
Sumter	1	6.0	1	3.0	..	..	1	2.0	3	47.0	9	55.5	25	336.0	17	233.6	11	73.8	20	222.5	..	..	..	..
Union	9	48.8	3	18.0	1	1.0	1	12.0	..	..	..	..	..	..	6	80.0	2	6.0	6	16.5	2	39.0	3	22.0
Williamsburg	5	40.1	1	35.0	3	32.4	10	359.5	15	237.1	13	434.7	91	1875.2	24	1277.5	26	637.9	13	292.6	4	30.2	1	20.0
York	7	47.8	3	18.0	2	1.7	5	5.1	2	28.1	..	..	16	64.9	15	116.2	20	116.8	33	202.8	8	86.2	7	27.9
TOTALS	163	2818.1	89	924.7	67	299.6	145	1452.9	196	2466.4	315	4221.6	1235	30343.1	923	32776.8	746	11860.0	771	17787.2	205	2376.6	127	1123.1

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1951-52

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	73	1.5	807.8	11.1
Railroads .....	156	3.1	1,938.8	12.4
Campers .....	115	2.3	3,010.8	26.2
Smokers .....	1,142	22.9	14,897.8	13.0
Debris Burning .....	973	19.5	22,658.8	23.3
Incendiary .....	2,063	41.5	54,896.2	26.6
Lumbering .....	100	2.0	1,650.8	16.5
Miscellaneous .....	360	7.2	8,589.1	23.9
* TOTALS .....	4,982	100.0	108,450.1	21.8

TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1947-48	1948-49	1949-50	1950-51	1951-52	Average for 5-year period
Lightning .....	1.2	0.4	0.2	0.6	1.5	0.7
Railroads .....	7.0	5.2	2.8	2.3	3.1	3.6
Campers .....	2.8	2.5	2.5	2.7	2.3	2.6
Smokers .....	31.2	27.3	19.9	25.4	22.9	24.3
Debris Burning .....	19.5	20.2	18.0	19.1	19.5	19.1
Incendiary .....	28.5	35.6	48.2	38.6	41.5	40.3
Lumbering .....	1.7	1.3	1.7	1.5	2.0	1.6
Miscellaneous .....	5.9	6.0	4.9	7.4	7.2	6.2
Unknown .....	2.2	1.5	1.8	2.4	..	1.6



TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1951-52

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	18	198.5	0.12	11.0
Aiken .....	450,200	185	6,896.4	1.53	37.3
Allendale .....	131,400	113	1,576.1	1.20	13.9
Anderson .....	173,700	32	275.9	0.16	8.6
Bamberg .....	126,000	112	2,007.8	1.59	17.9
Barnwell .....	147,800	103	925.9	0.63	9.0
Beaufort .....	188,400	79	2,368.5	1.26	30.0
Berkeley .....	398,974	305	4,209.4	1.06	13.8
Calhoun .....	123,500	59	1,195.8	0.97	20.3
Charleston .....	271,994	95	1,873.6	0.69	19.7
Cherokee .....	127,800	44	1,003.5	0.79	22.8
Chester .....	260,023	54	723.4	0.28	13.4
Chesterfield .....	310,000	66	4,957.0	1.60	75.1
Clarendon .....	228,500	175	3,448.2	1.51	19.7
Colleton .....	465,000	112	1,362.9	0.29	12.2
Darlington .....	208,500	118	1,259.3	0.60	10.7
Dillon .....	144,100	96	2,268.1	1.57	23.6
Dorchester .....	268,200	55	822.6	0.31	15.0
Edgefield .....	172,641	33	510.4	0.30	15.5
Fairfield .....	338,957	69	952.6	0.28	13.8
Florence .....	293,900	296	8,524.0	2.90	28.8
Georgetown .....	415,600	147	2,354.8	0.57	16.0
Greenville .....	267,800	151	1,176.8	0.44	7.8
Greenwood .....	198,913	52	389.2	0.20	7.5
Hampton .....	239,500	52	672.4	0.28	12.9
Horry .....	557,600	387	15,311.5	2.75	39.6
Jasper .....	280,000	61	702.8	0.25	11.5
Kershaw .....	336,500	84	1,710.5	0.51	20.4
Lancaster .....	199,400	64	687.2	0.34	10.7
Laurens .....	244,735	24	209.3	0.09	8.7
Lee .....	110,600	47	1,324.6	1.20	28.2
Lexington .....	291,500	105	2,170.7	0.74	20.7
Marion .....	224,700	90	1,524.8	0.68	16.9
Marlboro .....	150,600	107	2,578.8	1.71	24.1
McCormick .....	144,840	24	392.0	0.27	16.3
Newberry .....	205,003	29	724.3	0.35	25.0
Oconee .....	259,252	47	385.9	0.15	8.2
Orangeburg .....	318,800	531	17,778.8	5.58	33.5
Pickens .....	190,100	34	56.9	0.03	1.7
Richland .....	289,500	211	2,874.8	0.99	13.6
Saluda .....	149,956	32	511.2	0.34	16.0
Spartanburg .....	208,300	39	342.5	0.16	8.8
Sumter .....	205,400	88	979.4	0.48	11.1
Union .....	157,894	33	243.3	0.15	7.4
Williamsburg .....	429,800	206	5,272.2	1.23	25.6
York .....	226,300	118	715.5	0.32	6.1
TOTALS .....	11,300,008	4,982	108,450.1	0.96	21.8

TABLE 9—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1947-48 .....	11,542,170	3149	46,959.8	.41	14.9
1948-49 .....	11,789,643	5166	91,668.2	.78	17.7
1949-50 .....	11,300,008	8424	240,504.3	2.13	28.5
1950-51 .....	11,300,008	6643	147,840.3	1.31	22.3
1951-52 .....	11,300,008	4982	108,450.1	.96	21.8

TABLE 10—SEEDLING DISTRIBUTION—BY LAND CLASSIFICATION—1951-1952

LAND OWNERSHIP	Loblolly	Slash	Longleaf	Arizona Cypress	Redwood	Totals
Farms .....	2,286,350	1,845,500	201,900	81,900		4,415,650
Associations and Clubs .....	82,500	32,000	2,000			116,500
Schools .....	31,500	32,500	5,700			69,700
State Forests .....	110,000	20,600	28,600	600		159,800
Other State Lands .....	3,500	88,500	25,000			117,000
Other Public Lands .....	10,000	15,000	4,000			29,000
Other Small Owners .....	676,750	1,378,800	168,300	21,000	300	2,245,150
Forest Industries .....	4,194,000	2,521,700	108,500			6,824,200
Other Industries .....	931,500	515,000	91,800	1,000		1,539,300
Federal Lands .....	1,000,000		100,000			1,100,000
State Totals .....	9,326,100	6,449,600	735,800	104,500	300	16,616,300
Out-of-State .....			3,000			3,000
GRAND TOTALS .....	9,326,100	6,449,600	738,800	104,500	300	16,619,300



TABLE 11—1951-1952 SEEDLING DISTRIBUTION  
Counties—Species—Amounts

COUNTY	Loblolly	Slash	Longleaf	Arizona Cypress	Redwood	Totals
Abbeville .....	541,000		25,000			566,000
Aiken .....	460,250	863,750	75,400	7,000		1,406,400
Allendale .....	248,000	371,200	900			620,100
Anderson .....	155,500			7,000		162,500
Bamberg .....	18,000	110,000	33,000			161,000
Barnwell .....	60,000	260,000	25,000			345,000
Beaufort .....	174,500	171,000	41,000	1,000		387,500
Berkeley .....	1,697,000	153,000	900			1,850,900
Calhoun .....	56,000	51,000	4,000	4,000		115,000
Charleston .....	34,000	152,500	10,500			197,000
Cherokee .....	73,500		500			74,000
Chester .....	184,500	10,000	11,000			205,500
Chesterfield .....	57,000	19,000	23,600	100		99,700
Clarendon .....	61,500	85,000	6,500			153,000
Colleton .....	94,500	490,500	68,200	4,000		657,200
Darlington .....	26,500	6,000	14,000	4,000		50,500
Dillon .....	3,000	18,000	5,000			26,000
Dorchester .....	40,000	283,000	72,000			395,000
Edgefield .....	316,734			1,000		317,734
Fairfield .....	301,380	500	500	200	150	302,730
Florence .....	111,500	17,000	6,900			135,400
Georgetown .....	228,000	58,500				286,500
Greenville .....	128,000	2,000	3,000	7,000		140,000
Greenwood .....	631,273	1,000	5,000	800		638,073
Hampton .....	63,900	537,500	3,000			604,400
Horry .....	72,000	268,000	11,000	500		351,500
Jasper .....	229,600	529,500	53,600			812,700
Kershaw .....	148,882	1,307,000	15,300	4,000		1,475,182
Lancaster .....	366,795	8,500	9,500			384,795
Laurens .....	221,412		37,500	8,000		266,912
Lee .....	15,000	39,000	3,000	4,500		61,500
Lexington .....	144,500	90,000	54,000	5,000		293,500
Marion .....	4,000	1,500	10,000			15,500
Marlboro .....	5,000	71,000	12,900	500		89,400
McCormick .....	391,000		20,000			411,000
Newberry .....	405,304	3,500	500			409,304
Oconee .....	156,650	8,000	100	5,000		169,750
Orangeburg .....	74,000	159,000	21,500	9,200		263,700
Pickens .....	114,500			3,700	150	118,350
Richland .....	156,250	129,500	15,000	8,000		308,750
Saluda .....	135,970	1,250				137,220
Spartanburg .....	182,200	13,800	12,100	7,500		215,600
Sumter .....	136,000	71,600	21,000	5,500		234,100
Union .....	470,000		1,500	7,000		478,500
Williamsburg .....	67,000	78,000	900			145,900
York .....	64,500	10,000	1,500			76,000
State Totals .....	9,326,100	6,449,600	735,800	104,500	300	16,616,300
Out of State .....			3,000			3,000
GRAND TOTALS .....	9,326,100	6,449,600	738,800	104,500	300	16,619,300

**S. C. STATE COMMISSION OF FORESTRY**  
**DIVISION OF STATE PARKS**  
**Summary of State Park Use, July 1, 1951 - June 30, 1952**

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Fishermen	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathhouse Users	No. Out-of-State Cars	Total No. of Cars	No. Visitors Under 18	Total No. of Visitors
Alken .....	...	...	915	2,440	25,623	11,005	5,468	2,083	15,323	16,327	40,572
Barnwell .....	...	...	589	1,389	47,893	15,619	5,941	3,137	27,374	26,930	85,626
Campbells Pond (N) .....	...	...	776	231	881	2,246	753	493	1,659	2,957	7,725
Cheraw .....	627	4,163	17,363	9,279	76,569	97,337	30,286	19,145	59,665	127,285	236,400
Chester .....	...	...	3,392	640	39,537	...	...	2,399	21,191	25,642	85,348
Croft .....	...	...	...	1,437	26,613	30,672	30,672	481	34,279	70,064	137,339
Edisto Beach .....	312	1,452	4,179	7,853	50,697	34,023	4,552	1,265	31,862	56,789	111,698
Givhans Ferry .....	282	1,587	...	727	42,031	14,397	2,797	1,111	17,455	24,702	71,561
Greenwood .....	...	...	5,833	2,708	57,500	...	...	...	32,210	30,705	127,575
Greenwood (N) .....	...	...	...	40	3,365	...	...	...	615	1,945	3,480
Hunting Island .....	...	...	17,342	6,212	35,904	86,161	12,897	10,141	56,473	42,892	227,908
Hunting Island (N) .....	...	...	447	702	7,272	6,794	461	1,549	7,114	8,138	32,056
Kings Mountain .....	...	...	2,146	2,750	23,854	17,893	12,248	23,898	41,562	96,200	214,970
Lee .....	...	...	3,138	1,496	37,554	19,855	7,357	876	18,973	23,765	67,097
Little Pee Dee .....	...	...	...	65	1,174	...	...	4	796	1,056	3,005
Myrtle Beach .....	768	4,813	29,340	4,201	54,895	49,650	2,394	21,333	55,161	25,512	175,696
Oconee .....	1,353	8,034	...	5,488	42,052	40,502	11,077	1,966	32,634	14,559	165,413
Paris Mountain .....	...	...	...	13,885	94,029	24,869	23,559	3,171	67,850	80,534	299,723
Pleasant Ridge (N) .....	...	...	...	...	...	...	...	...	...	...	...
Poinsett .....	379	2,498	1,186	5,978	71,450	24,225	21,732	3,670	33,904	56,390	164,695
Mill Creek (N) .....	...	...	127	685	16,510	20,577	20,577	185	7,257	21,613	48,843
Rivers Bridge .....	...	...	227	494	12,677	11,943	11,943	620	15,639	21,478	43,512
Santee .....	...	...	891	5,984	58,391	31,234	2,403	1,304	25,597	55,063	113,091
Sesqui-Centennial .....	...	...	3,086	27,907	253,726	305,085	19,152	40,041	143,194	214,524	599,071
Table Rock .....	1,317	8,379	2,590	7,796	95,725	74,255	11,869	5,729	72,133	95,087	248,811
Colleton Wayside .....	...	...	...	1,962	11,165	...	...	6,886	13,657	10,129	66,876
<b>TOTALS</b> .....	<b>5,038</b>	<b>30,926</b>	<b>93,517</b>	<b>112,349</b>	<b>1,187,087</b>	<b>918,342</b>	<b>238,138</b>	<b>151,487</b>	<b>833,137</b>	<b>1,150,286</b>	<b>3,378,091</b>

Little Pee Dee—reflects only eight weeks use in May and June, 1952.  
Pleasant Ridge—under construction—not formally open for park visitors.  
(N)—Negro area.

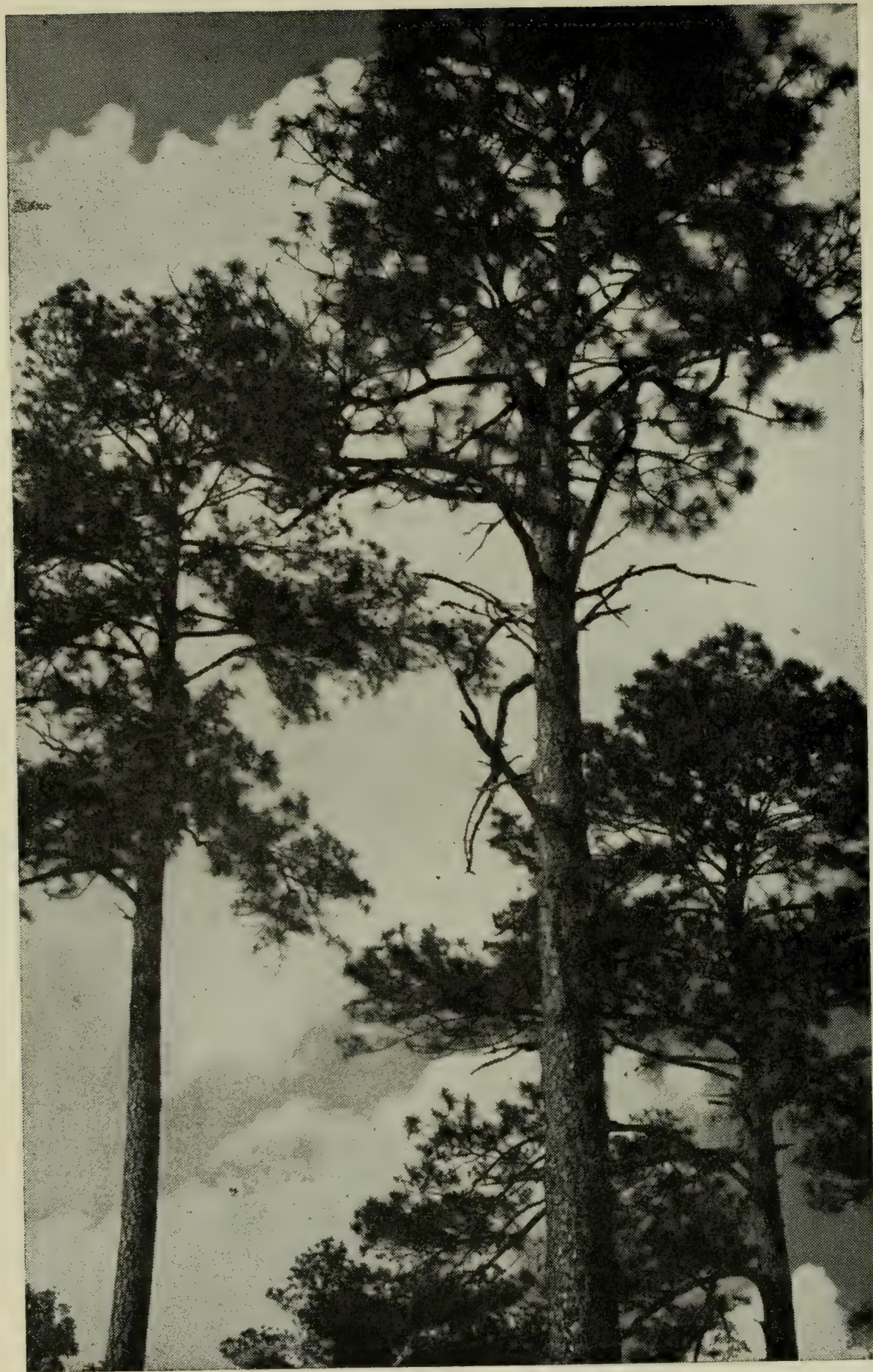












The major functions of the S. C. State Commission of Forestry are: protection of the private forest lands of the state from fire; assistance to private woodland owners in the development and management of their woodlands and in the harvesting and marketing of forest products; and the establishment, development and operation of a system of state parks.



STATE OF SOUTH CAROLINA

# REPORT

OF THE

# STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1952 TO JUNE 30, 1953



CHARLES H. FLORY, State Forester

COLUMBIA, S. C.

Printed Under the Direction of the  
State Budget and Control Board

## TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL.....	5
PERSONNEL .....	6
SUMMARY .....	13
Recommendations .....	17
FOREST FIRE PROTECTION .....	19
Forest Area Protected.....	20
Forest Fire Protection Organization.....	20
State Forests and Parks.....	22
Protection Personnel.....	23
Fire Protection Activities.....	23
Improvements, Maintenance and Equipment.....	28
Equipment .....	35
Forest Fire Summary.....	35
FOREST MANAGEMENT.....	39
Management Assistance.....	39
Reforestation .....	45
Cone Collection.....	47
Cooperative Forest Management.....	47
State Forests .....	48
Cassatt State Forest .....	48
Harbison State Forest.....	48
Manchester State Forest.....	49
Sand Hills State Forest.....	52
STATE PARKS .....	57
Acquisition of New Area.....	60
State Park Areas for Negroes.....	61
Historical Areas.....	63
Summary of State Park Facilities.....	64
Recommendations .....	65
INFORMATION AND EDUCATION.....	67
Forest Fire Prevention.....	68
Forestry Demonstrations.....	72
Conservation Week and Arbor Day.....	74
Towersite Improvement Contest.....	75
Motion Pictures .....	76
Vocational Agriculture School Forestry Program.....	77
Resource—Use Education .....	78
Talks .....	78
Exhibits .....	79
Radio and Television.....	81
Training .....	82
News Releases and Articles.....	83
Boys' Forestry Camp.....	83
Sign and Woodworking Shop.....	84
South Carolina Tree Farms System.....	84
ADMINISTRATION .....	87
Commission Organization Chart.....	86
APPENDIX .....	89



*To Honorable James F. Byrnes, Governor, and to the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1952 to June 30, 1953.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
A. Leland Slade, Jr., *Chairman.*

## THE STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1953)

### *Members of the Commission*

A. Leland Slade, Jr., Chairman, Aiken, S. C.  
 Dr. R. F. Poole, President, Clemson College, Clemson, S. C.  
 A. B. Taylor, Spartanburg, S. C.  
 Fulton B. Creech, Sumter, S. C.  
 Vendel M. Rogers, Mullins, S. C.

### *Secretary of the Commission*

Chas. H. Flory, State Forester

## DIVISION OF STATE PARKS

C. West Jacocks, State Park Director

T. D. Ravenel, Assistant State Park Director—Operations  
 Albert Schellenberg, Assistant State Park Director—Plans  
 E. R. Vreeland, Assistant State Park Director—Operations

### *State Park Superintendents*

Aiken State Park, E. S. Gunter, Jr., Supt., Windsor, S. C.  
 Andrew Jackson Historical Park (under construction)  
 Barnwell State Park, D. I. Ross, Supt., Blackville, S. C.  
 \*Cheraw State Park, George T. Holder, Supt., Cheraw,  
 S. C.  
 Chester State Park, Clarence Doster, Supt., Chester, S. C.  
 Croft State Park, J. E. Thornton, Ranger, Spartanburg,  
 S. C.  
 Edisto Beach State Park, J. M. Pope, Jr., Supt., Edisto  
 Island, S. C.  
 Givhans Ferry State Park, Wm. Wiggins, Jr., Supt.,  
 Ridgeville, S. C.  
 \*Greenwood State Park, M. R. LeRoy, Supt., Ninety Six,  
 S. C.  
 \*Hunting Island State Park, Norman B. Cooler, Supt.,  
 Frogmore, S. C.  
 Kings Mountain State Park, Raymond M. Sisk, Supt.,  
 Kings Creek, S. C.  
 Lee State Park, Van W. Pressley, Supt., Bishopville,  
 S. C.



Little Pee Dee State Park, LaFon Norton, Supt., Dillon,  
S. C.

Myrtle Beach State Park, Samuel H. Floyd, Supt.,  
Myrtle Beach, S. C.

Oconee State Park, James W. Ray, Supt., Walhalla,  
S. C.

Paris Mountain State Park, Ed. H. Miller, Supt., Green-  
ville, S. C.

\*Pleasant Ridge State Park, LeRoy Smith, Ranger, Cleve-  
land, S. C.

\*Poinsett State Park, F. Marion Dwight, Supt., Wedge-  
field, S. C.

Rivers Bridge State Park, E. B. Mobley, Supt., Ehr-  
hardt, S. C.

Santee State Park, G. B. LaBoon, Supt., Santee, S. C.

Sesqui-Centennial State Park, Marshall Holder, Supt.,  
Columbia, S. C.

Table Rock State Park, E. W. Cooler, Jr., Supt., Pickens,  
S. C.

Colleton Wayside Park, N. A. Carter, Caretaker, Cana-  
dys, S. C.

---

\*Includes area for Negroes.

## **DIVISION OF FORESTRY**

### **Branch of Administration**

E. B. Price, Assistant State Forester

C. H. Nelson, Head, Fiscal and Accounting

Delford F. Furney, Head, Property and Supply

Virginia S. Holmes, Head, Personnel and Office Services  
Warehouse, Sumter, S. C.

J. P. Watson, Warehouseman

### **Branch of Information and Education**

John C. Witherspoon, Assistant State Forester

Walter T. Ahearn, Information and Education Assistant

Nelson L. Peach, Information and Education Assistant

Sign and Woodworking Shop, Sumter, S. C.

Olin M. Ballentine, Foreman

### **Branch of Forest Management**

E. C. Pickens, Assistant State Forester

A. A. Lehocky, Management Assistant

Howard R. Scott, Management Assistant

Sand Hills State Forest, Patrick, S. C.

Randolph B. Lee, Director

Manchester State Forest, Wedgefield, S. C.

C. W. Nuite, Director

Horace L. Tilghman Nursery, Wedgefield, S. C.

L. M. Staley, Nurseyman

### **Branch of Forest Fire Control**

John R. Tiller, Assistant State Forester

W. J. Barton, Fire Control Assistant

John M. Shirer, Fire Control Assistant

John R. McLees, Fire Control Engineer

J. M. Geddings, Communications Engineer-Telephone

R. M. Littlejohn, Communications Engineer-Radio

Equipment and Repair Shop, Sumter, S. C.

O. P. Woodward, Supervising Mechanic



## DISTRICT OFFICES

Hugh M. Westbury, District Forester, Orangeburg, S. C.

Warren L. Brown, Assistant Forester, Orangeburg, S. C.

John Levis LeRoy, Assistant Forester, Aiken, S. C.

Adrian Lee Pardue, District Ranger, Aiken, S. C.

(Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington and Orangeburg)

J. T. Hance, District Forester, Camden, S. C.

Chester Kearse, Assistant Forester, Camden, S. C.

Maurice D. Stucker, Assistant Forester, Camden, S. C.

W. O. Morgan, District Ranger, Camden, S. C.

(Camden District includes counties of: Chesterfield, Kershaw, Lancaster, Lee, Richland and Sumter)

Alvin E. Kunz, District Forester, Florence, S. C.

Wm. M. Lindsey, Assistant Forester, Florence, S. C.

Robert N. McCombs, Assistant Forester, Florence, S. C.

C. Ray Anderson, District Ranger, Florence, S. C.

(Florence District includes counties of: Darlington, Dillon, Florence, Horry, Marion and Marlboro)

Chauncey R. Nichols, District Forester, Kingstree, S. C.

Melvin F. Rodgers, Assistant Forester, Kingstree, S. C.

John Elton Graham, Assistant Forester, Kingstree, S. C.

John R. Grubbs, District Ranger, Kingstree, S. C.

(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown and Williamsburg)

E. L. Middleswart, District Forester, Newberry, S. C.

Harry Avedisian, Assistant Forester, Newberry, S. C.

F. W. Horn, Assistant Forester, Greenwood, S. C.

Clifton T. Carter, Timber Marker, Chester, S. C.

Melton Wall, District Ranger, Newberry, S. C.

(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

C. A. Broadway, District Forester, Spartanburg, S. C.

Ralph W. Evans, Assistant Forester, Pickens, S. C.

Archie P. Butler, Jr., Assistant Forester, Spartanburg, S. C.

Claude F. Barden, Assistant Forester, Spartanburg, S. C.

Paul C. Bowie, District Ranger, Spartanburg, S. C.

(Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

Boris Hurlbutt, District Forester, Walterboro, S. C.

Marvin T. Gaffney, Assistant Forester, Walterboro, S. C.

Archie C. Craft, Jr., Assistant Forester, Walterboro, S. C.

J. Harlan McLees, Assistant Forester, Walterboro, S. C.

Joseph W. Goldman, District Ranger, Walterboro, S. C.

(Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton and Jasper)

### PROTECTION UNITS

Abbeville Unit Ranger, Charlie Shaw, Lowndesville, S. C.

Aiken Unit Ranger, J. Ramie Yonce, Aiken, S. C.

Allendale Unit Ranger, W. W. Brunson, Allendale, S. C.

Anderson Unit Ranger, John E. Embler, Anderson, S. C.

Bamberg Unit Ranger, P. H. Cave, Olar, S. C.

Barnwell Unit Ranger, S. E. Moore, Barnwell, S. C.

Beaufort Unit Ranger, R. W. Wisner, Beaufort, S. C.

Berkeley Unit Ranger, Harold McCoy, Bonneau, S. C.

Calhoun Unit Ranger, Hampie F. Ott, St. Matthews, S. C.

Charleston Unit Ranger, K. W. Leland, Charleston, S. C.

Cherokee Unit Ranger, B. T. White, Gaffney, S. C.

Chester Unit Ranger, J. Gill Simpson, Chester, S. C.

Chesterfield Unit Ranger, W. M. Smith, Chesterfield, S. C.

Clarendon Unit Ranger, Elliott E. Rose, Manning, S. C.

Colleton Unit Ranger, E. H. Benton, Walterboro, S. C.

Darlington Unit Ranger, Alton Yarborough, Darlington, S. C.

Dillon Unit Ranger, Ernest S. Oliver, Dillon, S. C.

Dorchester Unit Ranger, W. P. Johnston, Reevesville, S. C.

Edgefield Unit Ranger, S. G. Reel, Edgefield, S. C.

Fairfield Unit Ranger, R. E. Patrick, Winnsboro, S. C.

Florence Unit Ranger, Preston Tendall, Florence, S. C.

Georgetown Unit Ranger, Laurin T. Sessions, Georgetown, S. C.

Greenville Unit Ranger, G. G. Paris, Greenville, S. C.

Greenwood Unit Ranger, James C. Smith, Jr., Greenwood, S. C.

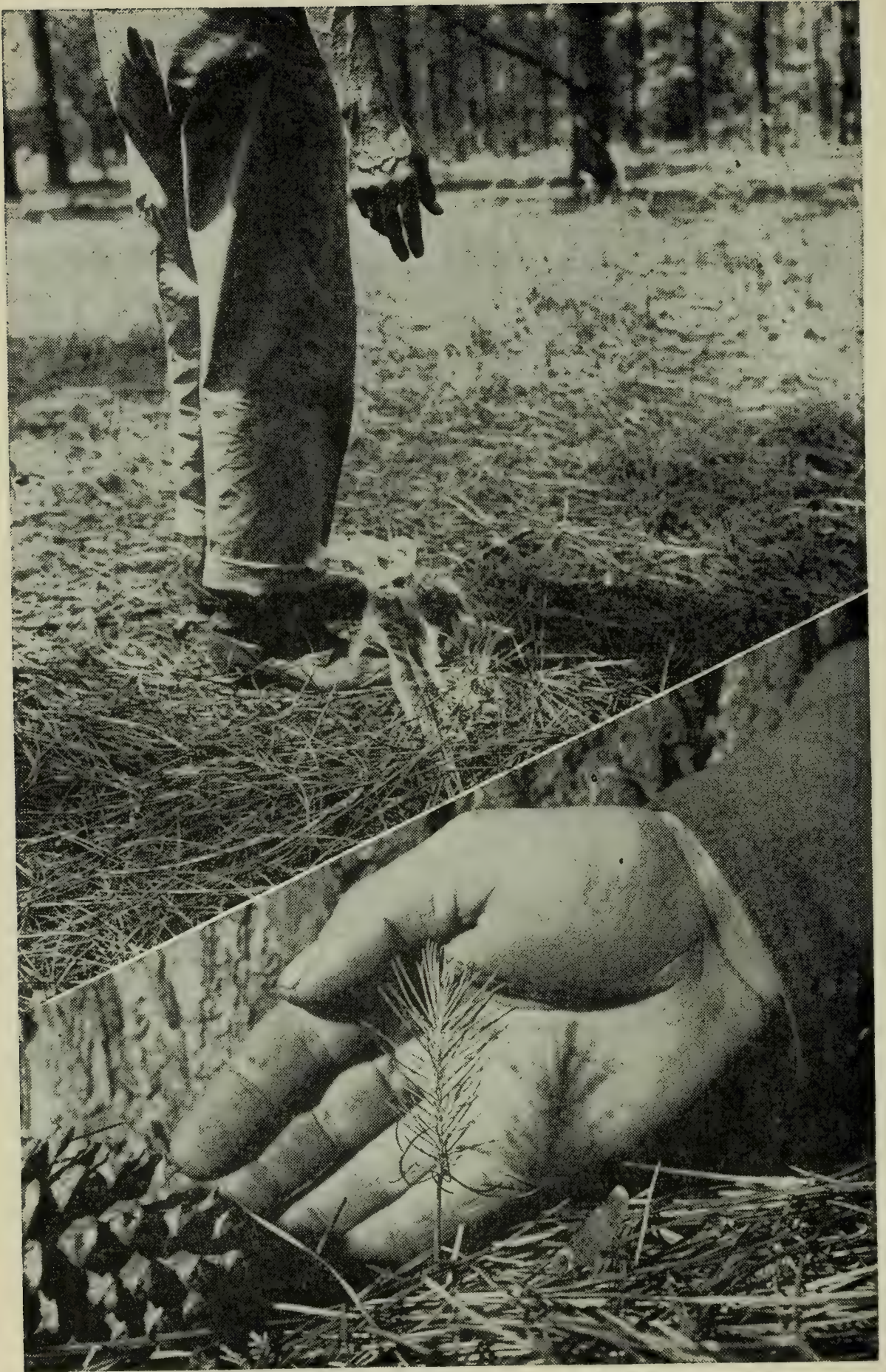
Hampton Unit Ranger, J. D. Peeples, Early Branch, S. C.

Horry Unit Ranger, W. E. Watts, Conway, S. C.



Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland, S. C.  
 Kershaw Unit Ranger, L. E. Smith, Camden, S. C.  
 Lancaster Unit Ranger, A. A. Plyler, Lancaster, S. C.  
 Laurens Unit Ranger, H. E. Martin, Laurens, S. C.  
 Lee Unit Ranger, E. B. Stuckey, Bishopville, S. C.  
 Lexington Unit Ranger, V. S. Bickley, Lexington, S. C.  
 Marion Unit Ranger, Hoyt Collins, Marion, S. C.  
 Marlboro Unit Ranger, Malcolm Lee Covington, Bennettsville,  
 S. C.  
 McCormick Unit Ranger, G. L. Sharpton, McCormick, S. C.  
 Newberry Unit Ranger, Marvin E. Wilson, Newberry, S. C.  
 Oconee Unit Ranger, D. O. Morgan, Walhalla, S. C.  
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg, S. C.  
 Pickens Unit Ranger, C. H. Gravely, Pickens, S. C.  
 Richland Unit Ranger, T. W. Cooper, Columbia, S. C.  
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda, S. C.  
 Spartanburg Unit Ranger, Charles E. Turpin, Spartanburg, S. C.  
 Sumter Unit Ranger, L. G. Cubbage, Sumter, S. C.  
 Union Unit Ranger, James G. Long, Union, S. C.  
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree, S. C.  
 York Unit Ranger, E. G. Foster, York, S. C.





By our own hand we destroy or protect . . . the choice is ours.



## SUMMARY

The fiscal year covered by this report marks the beginning of the second quarter-century of service to the people of South Carolina by the S. C. State Commission of Forestry. Guiding policies remain much the same as those established by members of the original Commission in 1927. Successes continue to be judged only in the light of the big job that lies ahead, the solving of State Park and Forest Conservation problems in order to constantly improve service.

These problems and objectives are outlined briefly in this introductory summary. A more detail report by branches of activity follows this introduction.

### **Forest Fire Protection:**

With the close of the 1952-53 fiscal year, it became evident that one more step in the progress of forest fire control had been made. Landowners and other citizens of South Carolina had cooperated with the Commission of Forestry in preventing an excessive number of fires from occurring during one of the most critical periods ever experienced in the history of our fire control effort. This cooperation by the people of the State added immeasurably to the ability of our fire control organization to cope with the fires which did occur and to minimize the resulting damage.

In October and November and, again, in March and April, drought and high winds contributed to unusually critical conditions which could have resulted in tremendous losses in South Carolina—if an excessive number of fires had occurred. The same critical conditions, with an excessive number of fires, occurred in many of the Eastern and Southern States—and resulted in staggering losses. No more fires occurred during these periods in South Carolina, however than could be handled by the fire organization, with the help of landowners and the people of the State. This is written, however, not with the idea of indicating any fulfillment of our overall objective in fire control—that of attaining a five-year average annual burn of not more than one-half of one (0.5%) percent, and an average annual occurrence of 2500 fires or less. Even with the relatively good record achieved during the past year, our average annual burn

for the past five years is still 133,330 acres, and average annual fire occurrence is 6029 fires.

Thus, the goal of the Commission of Forestry in forest fire control is still far from being realized, and the annual loss still does not constitute an acceptable risk either to forest landowners or to forest industry. Much intensification in many phases of fire control is necessary, particularly in fire prevention education, before adequate protection of all forest properties is accomplished.

### **Forest Management:**

Steady progress was made again this year in the field of giving professional advice and service to the private woodland owners of the state. Some 931 woodland examinations were made for private landowners during the year. More than 142,000 woodland acres were involved, the area per landowner averaging some 152 acres. Every effort is made to encourage owners of smaller woodland areas to put professional forestry advice into practice. The objective is to put every acre to work to produce the highest income on a perpetual basis. Foresters with the Clemson College Extension Service and foresters of the State Commission of Forestry work closely toward the end of providing this advice.

Of the 931 woodland examinations made, some areas had timber that needed cutting this year and Commission foresters marked over 16 million board feet and nearly 4,000 cords for a total of 315 landowners. This activity was carried on in accordance with the Forest Management Act of 1941. The wisdom of providing this service is evident from the fact that 93% of the forest land in South Carolina is in private ownership comprising over 108,000 landowners. The average size farm woodland is considerably less than 100 acres, and it is on these areas, generally, that the greatest need exists for improvement of forest practices.

The Commission's Horace L. Tilghman forest tree nursery at Wedgefield produced over 22 million tree seedlings for South Carolina landowners in 1952-53. Despite adverse growth conditions this was an increase of nearly 6 million trees over the previous year.

At the rate of approximately 1000 trees planted to the acre, landowners in the state reclaimed some 22,000 acres of idle land during 1952-53. The future job is made clear by the fact that at this rate of production nearly 70 years would be required to



plant the estimated 1,500,000 acres of idle land or unproductive forest land in South Carolina.

The four state forests operated by the Commission represent only 1% of the forest land in the state, but they serve as excellent demonstration areas for private landowners to observe. However, the work on these areas needs intensification to make them more than self-supporting.

### State Parks:

The importance of the service rendered South Carolina by its system of 22 State Parks can be visualized by the fact that over 3 million visitors used them during 1952-53. Repeated use is emphasized by the fact that the total population of South Carolina is slightly more than 2 million people. Attendance has increased six fold in the past 10 years.

The need for adequate maintenance of existing facilities and for certain additional facilities to keep pace with this growth is evident in the light of the conservation of human resources. Mental health and stability of families are direct results of wholesome outdoor recreation in the naturalistic setting of South Carolina's State Parks. With increased leisure on the one hand, and



Picnicking is one of the most popular activities enjoyed by families and other groups at South Carolina's state parks.



the tension of our times on the other, State Park values cannot be reckoned in dollars and cents.

Improved and additional facilities for Negroes are needed for more equitable service to our people.

#### **Administration:**

The Commission of Forestry during the fiscal year continued to lose both technical and other personnel as a result of low salaries. A total of 106 employees resigned during the year, of which 62% were county personnel.

The Commission budgeted and spent on all phases of the forestry and park program \$1,575,633.11, and of this total the Division of Forestry expended \$1,229,784.49 and the Division of State Parks \$345,848.62. (See financial sheet for detailed explanation of funds available and expenditures made.) State appropriated funds amounted to \$907,044.50 for the Division of Forestry, and \$365,962 for the Division of State Parks.

#### **Information and Education:**

The oft-repeated phrase "It is simply a matter of education" is more frequently stated than understood when it comes to specific forest conservation and State Park problems and opportunities. The State Commission of Forestry was founded on principles of practical education of the people of South Carolina to these issues.

Education as applied to the Commission is the sum of many things. It is a Ranger talking to a landowner, a class of school children, or to a volunteer offering help on a going woods fire. It is a district forester meeting with local citizens incensed over the woods fire problem in their community or conducting a tree planting demonstration for those ordering trees for the first time. It is a towerman talking to thousands via radio on a rainy day. It is a State Park Superintendent operating an efficient household as host to ten thousand people on a hot summer day or helping a school teacher unfold the mysteries of a nature trail to a group of children.

It is a landowner understanding that this tree should be cut and that tree left because it is growing wood at six to sixteen percent return on his investment. It is realizing that even little fires kill little trees regardless of why or how the fire started.

Press releases, pamphlets, or photographs—field demonstrations, films, or television—many subjects and many methods of expression add up to the Commission's concept of education.



Both problems and opportunities add up to the need for putting to work the phrase "It is simply a matter of education."

### Recommendations:

The major functions of the S. C. State Commission of Forestry, as charged by statute, are: protection of the private forest lands of the state from fire, insects, and disease; assistance to private woodland owners in the development and management of their woodlands, and in the utilization, harvesting and marketing of their forest products; the establishment, development, and operation of a system of State Parks.

To enable the Commission to more effectively do this job, the following recommendations are made:

(1) A vastly intensified forest fire prevention program which is carefully calculated to consistently reduce fire occurrence to an absolute minimum within a reasonable length of time.

(2) Additional manpower, heavy power equipment, hand tools, and radio communications to greatly intensify forest fire suppression and reduce excessive losses; some revision of existing fire laws to prevent any use of fire in woods during critical periods.

(3) Adequate maintenance of existing capital improvements, equipment and tools in activities of both the division of forestry and the division of state parks.

(4) Increase the production of forest tree seedlings needed to reforest the 1½ million acres of idle land in the state.

(5) Expand pine seed collection to insure at least one year's supply as reserve over annual needs.

(6) Intensify educational program to improve forest management practices, including selective harvesting, planting, and encouraging the growing of more and better quality timber products.

(7) Intensify activities in the field of forest disease and insect control.

(8) Begin an intensified program of forest research.

(9) Rehabilitate the four state owned and leased demonstrational forest areas to bring them into full production without further delay.

(10) Adequate operations and facilities for the existing state parks to keep pace with the greatly increased public use.

(11) Provide adequate state park facilities for Negroes.

(12) Provide adequate salaries and wages for personnel to encourage employment of competent and satisfactory employees.





One hundred and thirty-five lookout towers serve as the eyes of forest fire fighters who assist landowners throughout the state in suppressing woods fires.



## FOREST FIRE PROTECTION

With the close of the 1952-53 fiscal year, it became evident that one more step in the progress of forest fire control had been made. Landowners and other citizens of South Carolina had cooperated with the Commission of Forestry in preventing an excessive number of fires from occurring during one of the most critical periods ever experienced in the history of our fire control effort. This cooperation by the people of the State added immeasurably to the ability of our fire control organization to cope with the fires which did occur and to minimize the resulting damage.

In October and November, and again in March and April, drought and high winds contributed to unusually critical conditions which could have resulted in tremendous losses in South Carolina—*had an excessive number of fires occurred*. The same critical conditions, *with an excessive number of fires*, occurred in many of the Eastern and Southern States—and resulted in staggering losses. No more fires occurred during these periods in South Carolina, however, than could be handled by the fire organization, with the help of landowners and the people of the State. This is written, though *not with the idea of indicating any fulfillment of our overall objective in fire control*—that of attaining a five-year average annual burn of not more than one-half of one (0.5%) percent, and an average annual occurrence of 2500 fires or less. Even with the relatively good record achieved during the past year, *our average annual burn for the past five years is still 133,330 acres, and average annual fire occurrence is 6029 fires*.

Thus, the goal of the Commission of Forestry in forest fire control is still far from being realized, and *the annual loss still does not constitute an acceptable risk either to forest landowners or to forest industry*. Much intensification in many phases of fire control is necessary, particularly in fire prevention education, before *adequate protection* of all forest properties is accomplished.

The following pages describe in some detail the Commission's fire control organization and its activities and accomplishments during the fiscal year 1952-53.



## FOREST AREA PROTECTED

All woodland acreage in South Carolina is provided intensive protection from wild forest fires. The Commission of Forestry cooperates in furnishing intensive forest fire protection to a total of 11,300,008 acres of State and private forest land. Of this total 169,574 acres are State owned parks and forests. The remainder is privately owned.

In addition the U. S. Forest Service administers some 584,492 acres within National Forests boundaries. Also, there are some 58,100 acres owned by other Federal Agencies. These areas are furnished fire protection by the agencies having jurisdiction over them. Federal areas mentioned above are not included in the State-wide acreage total.

## FOREST FIRE PROTECTION ORGANIZATION

All fire protection work is conducted on a cooperative basis with the landowner. Personnel of the Commission of Forestry furnish assistance to the individual landowners in the way of leadership on going fires, hand tools and mechanized equipment,



The county forestry boards with five members each assist the state forester in the many aspects of fire prevention and suppression services rendered the citizens of the state.



and guidance in formulating forest fire protection measures which they may initiate on their own holdings. However, the over-all responsibility of the protection and control of wild fires must remain with the landowner. Each County Unit organization is a skeleton force designed to give the landowner all cooperation and assistance available and possible to prevent and suppress wild fires on his property. This organization is not large enough and does not have adequate equipment to assume the responsibility of preventing and suppressing all fires which occur without the assistance of the landowners.

The State is divided into seven forest service districts. The administration of all forestry activities, including fire control, is under the direct supervision of the District Forester.



One of the most important duties of the warden is in the field of fire prevention. The use of posters is one way he brings this great need to the attention of the citizens of his community.

### County Units:

Each of the seven districts in the State is broken down into individual County Unit organizations. The County Units are supervised by Unit Rangers under the direction of the District



Forester. Each County is divided into Warden districts. Wardens are assigned to these districts and are responsible to the Unit Ranger for all fire protection activities within their respective boundaries. Rangers and Wardens are supported by Tractor Operators, Towermen and Flexible Crew Members. Other key individuals which play an important part in the County Unit organization are the volunteer crew members. These civic minded men and women are organized into fire crews and actively prevent and suppress fires within their own communities. A total of 2,254 crew members were organized during the year to serve as community leaders and assist with the organization of fire protection in their neighborhood. As the result of the efforts of these volunteer community leaders, and various members of the County Unit organization, some 17,410 other individuals actually assisted regular Unit personnel on fires throughout the State.

### **STATE FORESTS AND PARKS**

One of the major responsibilities of State Forests and State Parks personnel is the prevention and suppression of wild woods fires on these State-owned areas. All of the individual forests and parks have their own tools and equipment which are kept in first class condition and ready for immediate use at all times. Local County Unit personnel, along with District and Central Office personnel, furnish the Parks and Forests with as much fire control assistance as possible. Fire plans for these State-owned areas have been completed and are in operation. These plans, which are tied in closely with the individual Unit Fire Plans, result in excellent coordination and cooperation between State Forests, State Parks, and County Unit organizations. State Forests and Parks in South Carolina comprise a total of 169,574 acres.

#### **National Forests Protection:**

Two National Forests in South Carolina, the Francis Marion, located in the Coastal Plains, and the Sumter National Forest in the Piedmont, are provided fire protection by personnel of the U. S. Forest Service. National Forest areas in South Carolina include a total of 584,492 acres.



### **Cooperative Agreements:**

Inasmuch as both the State Commission of Forestry and the U. S. Forest Service are primarily concerned with the protection of all forest lands under their individual jurisdiction, and recognize the fact that these two agencies can assist one another materially in affording adequate protection, cooperative agreements have been drawn up and put into effect, thereby greatly facilitating the coordination of all forest fire protection efforts on areas for which each is responsible. These agreements place responsibility for protection of forest lands on the agency having the greater forest protection area in the immediate vicinity of the property in mind. Definite protection boundaries of each agency have been established.

### **PROTECTION PERSONNEL**

In addition to technical fire control personnel in the Central and District Offices, a total of 353 persons were employed in fire protection and suppression work on full time. This number includes 46 Rangers, 133 Wardens, 35 Tractor Operators, and 137 Towermen. 195 Flexible and Retainer Crew Members were employed on a part time basis during especially dangerous fire weather and fire occurrence conditions. A total of 19,664 persons assisted the regular Unit organization in fire suppression in their respective communities. Of this total 2,254 individuals were organized as community leaders and assisted with prevention work as well as suppression activities.

### **FIRE PROTECTION ACTIVITIES**

#### **Training:**

A well-trained man is a confident man who exercises initiative and does a job well and on time. For this reason the Fire Control Branch of the Commission of Forestry strives at all times to perfect a training program that will result in all of its personnel being well trained.

During the fiscal year 1952-53 good progress was made in training. A very successful State-wide training school, attended by all Unit Rangers, District and Columbia Office personnel, was held in September at Oconee State Park. Subjects covered included Safety and First Aid, Fire Prevention and Fire Line Supervision, especially on large fires.





Training meetings serve to constantly improve the quality of service that the Commission personnel render in carrying out their respective duties in the state.

Shortly afterwards, representatives of the Information and Education Branch and the Fire Control Branch conducted day-long, intensive training schools on Fire Prevention. Seven of these meetings, one per District, were held with Unit Rangers and District Office personnel attending.

In addition to the above, approximately twenty-four (24) joint unit training schools were held. Unit Rangers, Wardens, Towermen, Tractor Operators, District and Columbia Office personnel attended these meetings, with the bulk of the instruction being given by the Unit Rangers. Subjects covered included Fire Prevention, Fire Line Supervision, Safety and First Aid, Danger Index, and Work Planning. These joint unit meetings proved highly successful and considerable improvement has resulted.

In addition each county unit holds a weekly meeting at which time the Ranger gives some timely training. He decides in advance what training is needed and prepares the training in advance. These meetings are often attended by some member of the District Office who helps with the instruction.



One of the best methods of training is individual, on-the-job training. This is one of the most important jobs of Unit Rangers and other supervisory personnel. Such training and instruction is continually carried on, resulting in improved performance of all phases of Fire Control activities.

**Inspection:**

A complete Unit Inspection is made in each county each year. This inspection goes into great detail and covers every phase of Fire Control activity within a county unit. These inspections are welcomed by unit personnel. They point out the good as well as the bad, and their aim is to increase the efficiency of the organization. After the inspection is made, Unit Rangers receive a report which they use as a guide to correct any deficiencies that might still exist within their unit. Many times such deficiencies are corrected on the spot at the time of the inspection. District Office and Columbia Office personnel conduct the inspections.

Periodic inspection of all automotive equipment is carried out by three traveling mechanics operating out of the Commission's Central Shop and Warehouse at Sumter. These traveling mechanics endeavor to keep all mechanized equipment in good operating condition, and stress the importance of keeping the various units ready for routine and emergency calls at all times.

**Fire Plans:**

Unit Fire Plans were prepared some six years ago for all County Units, State Forests and Parks to set forth standard and specific procedures for the control and operation of each organization and to serve as a guide by all personnel in carrying out various work activities. Several years ago these plans were revised and brought up to date in accordance with current operational procedure. These plans have greatly increased the over-all efficiency of the Fire Control Program.

**Law Enforcement:**

Law Enforcement is considered a part of the educational program of the Forestry Commission. Many times a prosecution re-

sulting in the conviction of a fire law offender results in reduced fire occurrence in a community. Occasionally this is the only method to prove effective.

All illegal fires are thoroughly investigated, and when responsibility can be fully determined the guilty persons are apprehended and tried before local magistrates. A total of 244 persons were prosecuted for starting illegal fires during the year. Of this total 235 persons were convicted. Horry County led the State with 21 prosecutions and 18 convictions. Based on the number of fires occurring, however, Chesterfield County led with one (1) prosecution for each 4.9 fires. Other county units maintaining good averages were Clarendon, Greenville, and Fairfield.

#### **Burning Permit Law:**

Seven counties in the State now have a Burning Permit Law. This law requires landowners to obtain a permit before burning brush, hedgerows, woodlands or fields between October 15 and May 15. These counties are Aiken, Orangeburg, Greenville, Georgetown, Charleston, Marlboro and Horry.

A total of 9,822 permits were issued in these seven counties during the year. Of this total, nineteen (19) of the fires were allowed to burn areas not intended to be burned by the landowner. Twenty-five (25) persons were prosecuted for the violation of the Burning Permit Law during the year.

#### **Southern States Fire Control Conference:**

The annual Southern States Fire Control Conference was held at Cashiers, N. C., immediately after the close of the spring fire season. In addition to the Southern States Fire Chiefs and their Assistants, the meeting was also attended by the various State Foresters, Information and Education Chiefs, Radio Engineers, representatives of the U. S. Forest Service, and various private equipment concerns. The program was designed to better coordinate the activities of all individual States in an endeavor to facilitate mutual forest fire protection efforts.



# BURNING PERMITS

**MUST BE OBTAINED BEFORE BURNING BRUSH OR OTHER MATERIAL ON OR NEAR WOODLANDS IN THIS COUNTY DURING THE FOREST FIRE SEASON MONTHS—OCTOBER 15th TO MAY 15th.**

1. Any person wishing to burn or ignite any material in woodlands or hedgerows adjacent to woodlands between the 15th day of October and the 15th day of May, must first obtain a permit to do so from the County Ranger or his representatives (Wardens, Towermen).
2. Any person obtaining such a permit must carefully supervise any fire that they may start.
3. The County Ranger or any issuing officer is authorized to refuse to issue a burning permit during dry, windy days when burning is hazardous and when fires might spread to lands of another.
4. The County Ranger or any issuing officer is authorized to cancel permits when weather conditions make burning hazardous.
5. Any person violating this act shall be guilty of a misdemeanor and upon conviction shall be fined not less than ten (\$10.00) dollars nor more than one hundred (\$100.00) dollars, or imprisonment for not less than ten (10) days nor more than thirty (30) days.
6. For a second offense, the punishment shall be a fine of not less than twenty-five (\$25.00) dollars nor more than five hundred (\$500.00) dollars, or imprisonment for not more than one year.
7. This law does not relieve any person from complying with all other State and Federal fire laws.

**THIS LAW IS TO PROTECT YOU AND YOUR  
NEIGHBORS FROM CARELESS BURNING.**



**PERMITS COST NOTHING**

**GET THEM FROM YOUR COUNTY RANGER,  
WARDENS, OR TOWERMEN.**



**S. C. STATE COMMISSION OF FORESTRY**

**HELP STOP WOODS FIRES**

The use of Burning Permits assists the fire protection efforts of the Commission in seven counties.

## IMPROVEMENTS, MAINTENANCE AND EQUIPMENT

### Lookout Towers:

There are 157 lookout towers in South Carolina, and 133 of these are owned by the Commission. One Hundred Twenty-one (121) of these towers are steel, and 12 of them are of wooden structure. All wooden towers will have to be replaced in the near future.

### Tower Unit Buildings:

The Commission has not erected dwellings for the tower personnel on 23 of its tower sites, and there are 39 sites that do not have necessary barns and other out buildings that are included in a standardized tower site. Due to lack of necessary funds to complete them, the improvement program was halted in 1948.

There is a great deal of heavy maintenance work needed on all of the existing tower sites, the total cost of which is estimated would be \$50,000. Needed repairs include new roofs, painting and replacement of sills, porch decks and general repair work.

Our present working budgets do not provide for an early remedy to this situation.

### Telephone Lines:

During the fiscal year routine telephone line maintenance work such as right-of-way clearing, replacing of insulators, brackets and poles, clearing of transmission troubles, etc., was carried on to the extent that the telephone system was kept in a satisfactory state of maintenance and operation during the year. All maintenance and repair work was carried out by members of the various unit organizations with help and supervision by personnel from the various District Offices and the Telephone Communications Engineer. Through the alertness and conscientious efforts of unit personnel service interruptions between towers, personnel and other stations were few and of short duration during the entire fire season.

The Commission's policy of replacing telephone communications with two-way radio was continued during the year with the result of 137.1 miles of standing telephone line structure being sold in place, and 163.0 miles were salvaged in various counties over the State and the salvaged materials sold. Radios were purchased with the receipts from the sale of the line and

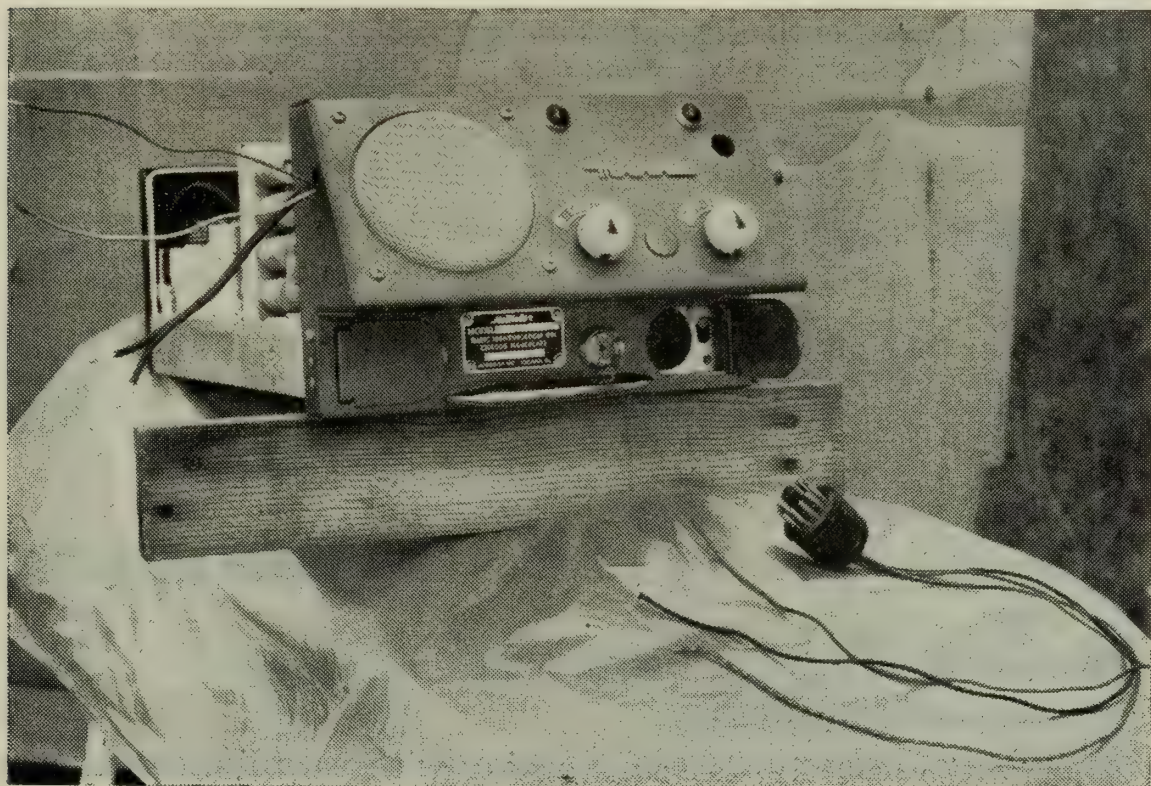


materials and were installed in all of the stations and vehicles affected by the sale. The use of receipts from the sale of telephone line and telephone line material for the purchase of radio equipment was made possible several years ago, by the authorization of the General Assembly, and has been a great aid to the Commission in making a partial conversion from telephone communication to radio.

At the end of the fiscal year the Commission still has a telephone system in use consisting of 1,562 miles. It is hoped that this remaining 1,562 miles of line can eventually be sold in order that more radio equipment can be obtained.

### Radio:

Funds derived from the sale of telephone lines in 1952-53 were applied to the purchase of two-way radio equipment, and gave quite a boost to the program. Installations included eighteen (18) base stations, sixteen (16) mobile units, and eight (8) auxiliary receivers in twenty-two (22) of the forty-six (46) counties. Additional equipment on order as of June 30, 1953, includes basic radio for the last five (5) counties in the state



The need for more base and mobile radio units in improving the reporting and dispatching work of Commission forces continues. As it stands the system is only 48% complete.



which do not have any at present. These counties are: McCormick, Saluda, Union, Edgefield, and Cherokee.

Including the above installations the S. C. State Commission of Forestry owns the following radio equipment as of July 1, 1953:

128 Mobile Units, including 1 Handi-Talkie and 4 Pack Sets

108 Base Station Units

—

Total—236 Two-Way Units

35 Auxiliary Receivers

This total amount of equipment completes 48% of the proposed radio system of the Forestry Commission.

Private industry added twelve (12) mobile units during the year, making a total of sixty-nine (69) radio units operating in the Forestry Commission system.

An additional District Radio Technician was employed to assist in the installation and maintenance program which is continuously in effect.

It is estimated that the radio program of the State Commission of Forestry is 48% complete, and with anticipated funds forthcoming, the entire system should be completed in 2 more years.

#### **Aircraft in Fire Protection:**

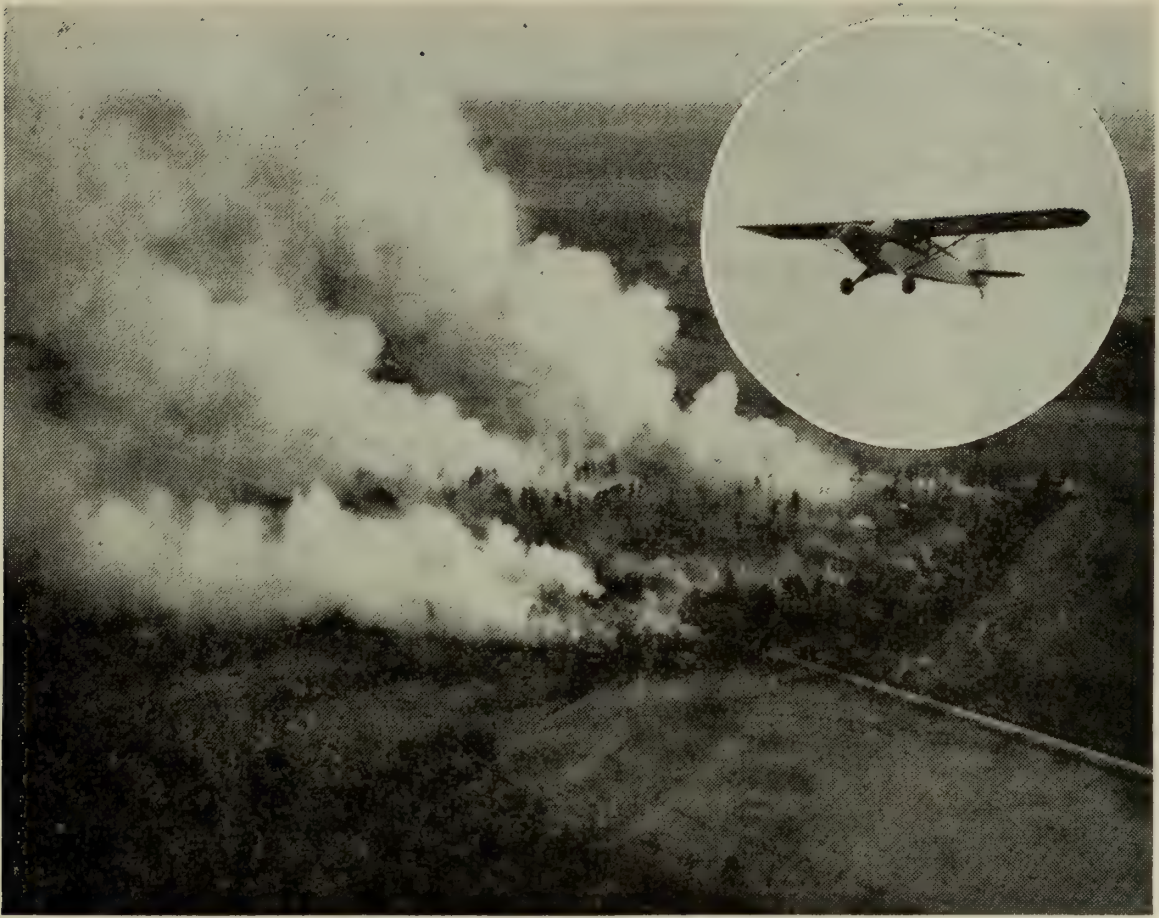
This is the third year that the Commission of Forestry has made limited use of aircraft in fire control work.

The four (4) most important uses for aircraft are:

1. Fire detection, including identification, location and appraisal.
2. Direction of suppression work on major fires.
3. Direction, by two-way radio, of fire crews in unfamiliar areas.
4. Check fires that are being brought under control for break-overs and spot fires.

During the past fire season, working with very limited funds, one plane was used on a rental basis. During November the entire State was for several weeks blanketed with smoke haze





Limited use of airplanes flown under contract assisted immeasurably in detection and suppression work during periods of high fire hazard.

drifting from large fires in adjoining states. Under these conditions when visibility was so bad that fires could not be detected from lookout towers, the plane was used on two (2) large fires in Marlboro and Marion Counties, and in both cases resulted in saving several thousand acres on each fire that would otherwise have burned.

It is felt that a Commission-owned plane would result in considerably more use in patrolling and scouting fires and would prove more economical and give better fire protection to the woodlands of the State.

#### **Fire Danger Measurement:**

The Commission of Forestry now owns and operates a forest fire danger measurement station in each county of the State. This State-wide system of weather stations was initiated shortly after the last war, and has played an important role in the overall efficiency of Fire Control activities. All stations are read twice daily, and the burning index, which indicates degree of

inflammability, and danger index, which reflects accumulated fire danger, is relayed to all personnel. The dissemination of this information enables the Fire Control organization to determine forthcoming high fire hazard conditions, alert all personnel, place extra crews on duty, and prepare for any emergency which may arise. The knowledge of accumulated fire danger enables District and Unit organizations to determine when blow-up conditions are prevalent, and make necessary preparations to prevent a disaster. Average records for the State indicates the following number of days of each of the five (5) major burning index groups:

0- 1	121 days
2- 5	125 days
6- 17	102 days
20- 45	17 days
50-100	

### ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

<i>Items</i>	<i>Value</i>
133 Lookout Tower Units.....	\$1,411,730.00
1177 Miles Truck Trails.....	2,942,503.00
1562 Miles Telephone Lines.....	468,600.00
Fire Danger Measurement Stations.....	3,450.00
Radio: 74 10 watt Base Stations..... @ \$ 535	\$39,590
9 Remote Control Base Stations @ \$1200	\$10,800
25 50 watt Base Stations..... @ \$ 900	\$22,500
35 30 watt Mobile Units..... @ \$ 500	\$17,500
93 10 watt Mobile Units..... @ \$ 400	\$37,200
35 Paging Receivers ..... @ \$ 200	\$ 7,000
	<u>134,590.00</u>
Total.....	\$4,960,873.00

### EQUIPMENT

Twenty-nine (29) new trucks were purchased for the Fire Control Branch during the year. All were purchased as replacements and distributed as follows: Sixteen (16) pickups and eight (8) long wheel base trucks as replacements in county units, and five (5) pickups and Sedan delivery vehicles for Traveling Mechanics and Radio Technicians.

All equipment is purchased and assigned on the basis of greatest need.



# INVENTORY FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1953

<i>Items</i>	<i>Value</i>
2828 Back Pack Pumps.....	\$ 38,658.76
5674 Fire Rakes .....	12,879.98
2444 Fire Swatters.....	6,940.96
4 Heavy Crawler Tractors.....	30,000.00
1 Medium Crawler Tractor.....	2,490.00
6 Light Crawler Tractors.....	15,600.00
10 Heavy Duty Fire Plows.....	7,800.00
28 Light Tractors w/track System.....	57,400.00
37 Light Suppression Plows.....	7,380.00
3 1/4 Ton Jeep w/fire Plows.....	4,800.00
35 Light Equipment Transport Trucks.....	85,750.00
5 Truck Tractors.....	17,000.00
6 28 Ft. Transport Trailers.....	15,600.00
1 11/2 Ton Stakebody Truck.....	2,200.00
2 Pickup Trucks.....	3,400.00
47 Rangers' 1/2 and 3/4 Ton Pickup Trucks.....	79,900.00
5 Sedan Delivery Trucks.....	9,000.00
Total.....	<hr/> \$396,799.70

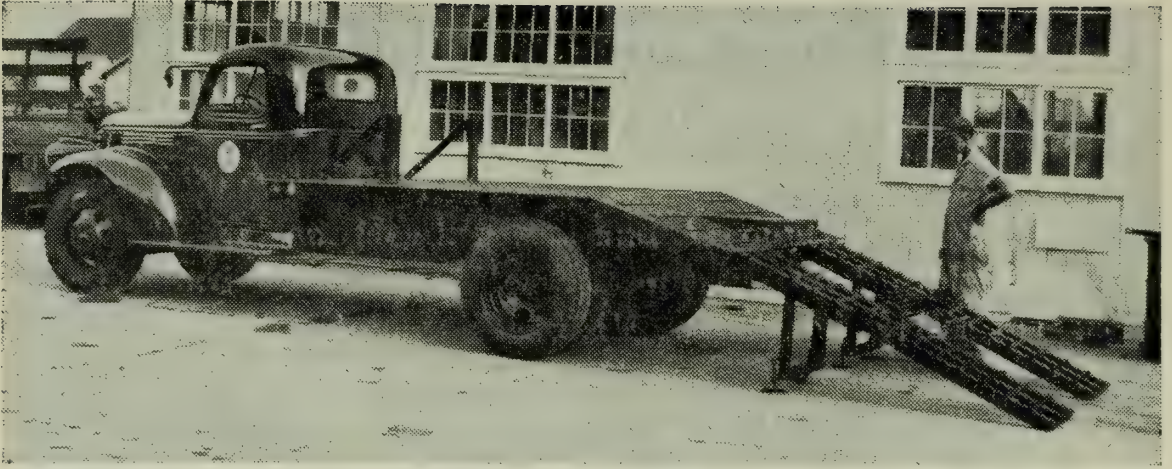
## Equipment Maintenance Shop:

The Fire Control Branch operates a Central Repair Shop at Sumter. The shop is operated primarily to handle specialized repair work as overhaul of fire pumps, booster tanks, and installation of auxiliary equipment.

In recent years the shop facilities have been expanded to handle almost all of the heavy repairs to trucks and tractors for the entire State for economic reasons.

There are three traveling mechanics that headquarter at the Sumter Shop, and travel throughout the State making frequent inspections of all fire control equipment in the field. At the time of inspection the traveling mechanics make as many repairs and adjustments on the spot as limited facilities under field conditions will allow.

Some of the work handled at the shop and by shop personnel in the field during the year includes:



Sturdier and safer transport bodies were provided for 17 tractor units in the state during the year.

1. The dismantling and transportation of two (2) 165' steel radio towers.
2. Construction of two (2) heavy reinforced concrete tower foundations.
3. Built completely and installed seventeen (17) special equipment bodies.
4. Built eighteen (18) open fire danger screens.
5. Handled eleven (11) special field demonstrations of fire control equipment.

Other general shop work consist of:

<i>Repairs To:</i>	<i>No. Jobs</i>
Light suppression tractors and plows.....	64
Heavy tractors and plows.....	18
Heavy trucks .....	14
Heavy trailers .....	3
Truck body.....	1
Cleaned and treated booster tanks.....	70 each
Modified tool racks.....	22
Repaired and rebuilt booster tanks.....	24
Radio trucks.....	3

<i>Overhauled:</i>	<i>No. Jobs</i>
Concrete mixer.....	1
Water pumps and engines.....	3
Trailer, heavy .....	1
Field Inspections of equipment.....	416
Field Repairs to equipment.....	462



The engineering and mechanical staff rendered assistance throughout the year to landowners by demonstrating fire control equipment and advised as to methods.

### FOREST FIRE SUMMARY

The fire season during this fiscal year is considered normal. Several short periods of very severe burning conditions occurred during the year. The latter part of October and first part of November was characterized by severe drought and fairly high winds which resulted in rather high fire occurrence and acreage burned for this particular season. 604 fires, which burned 12,882.4 acres, occurred during the month of November. This month proved to be the second most hazardous month of the year for the number of acres lost by wild fires. April was the most hazardous month when 938 fires burned 15,310.0 acres. Moderately high fire occurrence was also experienced during January and March.

Total rainfall for the State average 44.4 inches, which is 1.97 inches below normal. The greatest deviations from normal occurred during July, October, and April, when 2.60 inches, 1.84 inches, and 1.18 inches respectively, were recorded sub-normally for those particular months.

### Illegal Fires:

A total of 4,928 illegal fires occurred during the fiscal year, burning a total of 78,193.8 acres, or .69% of the total forest area of the State. The average area burned per fire was 15.9 acres. The 938 fires which burned 15,310.9 acres during the month of April represents 19% of all the fires which occurred during the year. This condition was due primarily to a sub-normal amount of precipitation and high winds which favored high fire occurrence and acreage burned. Even though very favorable burning conditions were experienced during the months of October and November, the County personnel handled the situation quite effectively and prevented much greater losses which were possible during that period. The highest fire occurrence and acreage burned occurred in Orangeburg County where 448 fires burned 8,406.7 acres, or 2.64% of total forest area in the County. Horry County suffered the second greatest acreage burned with 8,279.7

acres or 1.48% of the total woodland area in the County. Both of these Counties have Burning Permit Laws which require that Permits be secured by persons who plan to burn brush, fields and ditch banks, adjacent to woodlands, between the dates of October 15 and May 15 of each year. Accordingly, in counties which have Burning Permit Laws, all fires which are started by landowners who did not first obtain a permit are recorded as illegal, even though they are confined within the bounds of the respective property. Berkeley County experienced the second largest fire occurrence with 354 illegal fires.

McCormick and Laurens Counties experienced only 32 illegal fires which were the smallest number to occur in any of the counties of the State. Calhoun County experienced the smallest burned with 152.7 acres. It should be especially noted that nine (9) counties held the area burned to two-tenths (0.2%) percent of one (1.0%) percent, or less, of the total area under protection. The counties attaining this record were Abbeville, Calhoun, Edgefield, Fairfield, Georgetown, Hampton, Lexington, Newberry, and Pickens. It should also be noted that the counties of Chester, Edgefield, Georgetown, Laurens, and Kershaw had less than twenty (20) fires per hundred thousand acres protected, and the counties of Abbeville, Calhoun, Edgefield, Georgetown, Hampton, Lexington, Newberry, and Pickens held the area burned to less than two hundred (200) acres for each hundred thousand acres protected.

### **Causes of Fires:**

Incendiarism caused the greatest number of fires which were experienced during the year. 1,902 fires were attributed to this one reason for burning. Smokers followed a close second with 1,210 fires. Debris Burning caused 964 fires. These three causes accounted for 82.7% of all the fires which occurred.

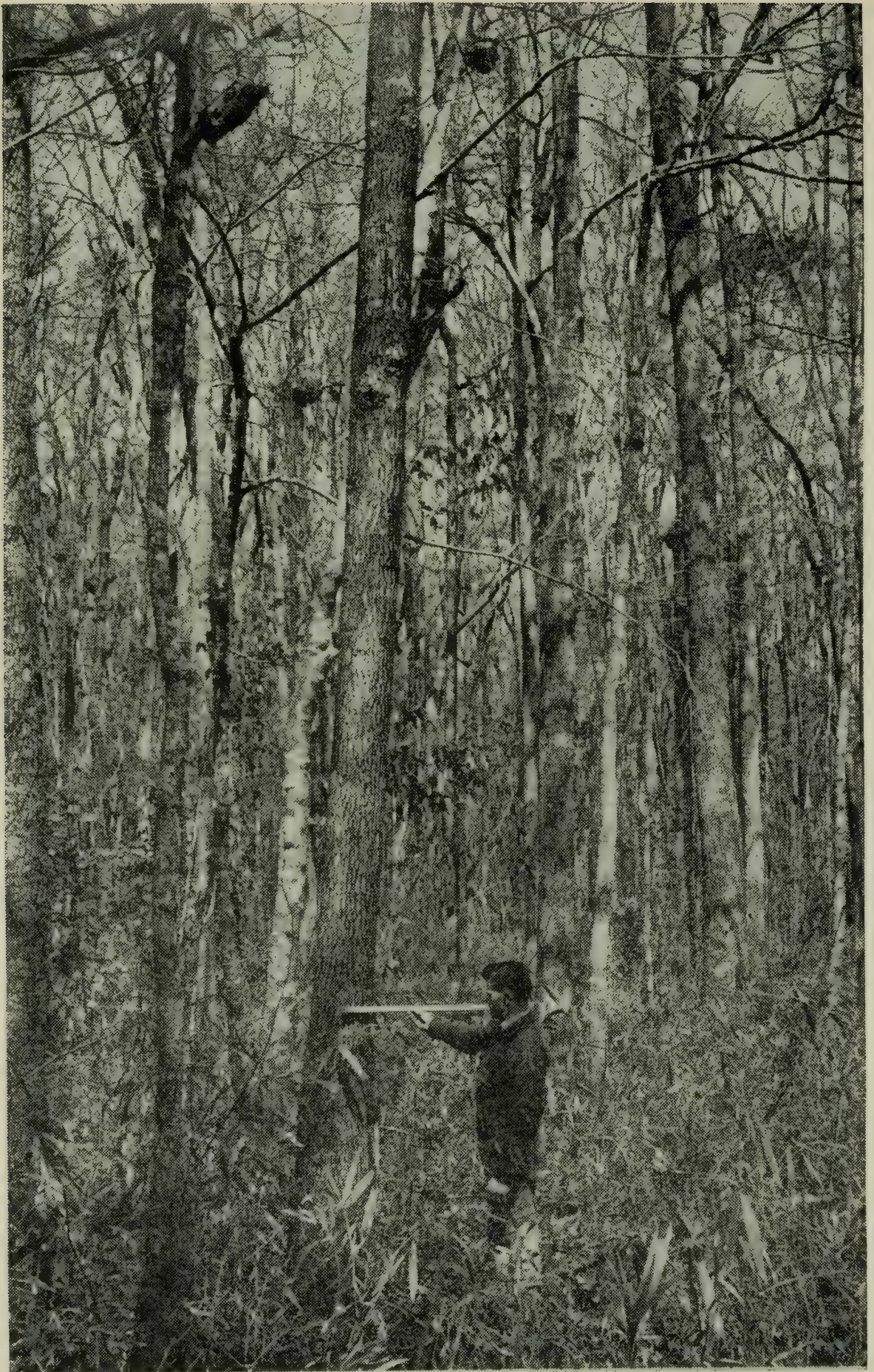
### **Legal Fires:**

Many landowners throughout the State elect to burn over certain woodland areas each year, or each series of years, for various purposes. As long as the fire is confined to their own property boundary lines, the burning is classed as legal. A total of 3,772 legal fires were set, burning a total of 236,260 acres of forest lands during the year. 889 fires burning 41,475 acres were



attributed to landowners desiring to reduce forest fire hazards. For the protection of game, birds, and improvement of shooting conditions, 132,544 acres were burned by some 107 fires. 942 fires burning 13,867 acres were conducted to rid timber areas and/or potential forest lands from accumulated debris and rubbish. 1,258 fires burning 37,476 acres were burned on woodland pastures. 576 miscellaneous fires for various purposes such as boll weevil eradication, destruction of ticks, insects, snakes, etc., burned 10,896 acres.





Each year Commission Foresters provide direct in-the-woods assistance to approximately 1,000 landowners in S. C. to help them grow and harvest their timber crop for continuous maximum production and profits.



## FOREST MANAGEMENT

### Management Assistance:

The major emphasis of the Management branch activities was again directed towards assisting private landowners with their woodland management problems.

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing foresters to help landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection and reforestation measures needed.

In cases where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a sample timber sale agreement. The charge for this service is fifty cents per thousand board feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

During the year Commission foresters made 931 woodland examinations on 142,054 acres of forest land, and selectively marked a total of 16,332,715 board feet and 3,935.0 cords for 315 landowners on 12,109 acres of forest land. The following table shows the continuous increase in woodland examination and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature.

Commission Foresters and Extension Foresters again followed the policy of referring all of the larger jobs and some of the smaller jobs to consulting and industry foresters wherever practical. Our records indicate 91 jobs referred to consulting foresters where properties were examined by Commission or Extension Foresters and an estimated like number was referred to consultants where examinations were not made by Commission Foresters.

## SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
1950-51 .....	998	173,057	339	14,275	19,634,153	3,896
1951-52 .....	919	170,948	288	11,931	18,031,822	3,088.6
1952-53 .....	931	142,054	315	12,109	16,332,715	3,935
Totals.....	6,517	1,457,682	2,280	159,313	212,779,450	29,749.2

Prices received from marked sawtimber for the past five years are shown in the following table:

### TIMBER SALES SUMMARY FOR SOUTH CAROLINA 5 YEAR PERIOD

Fiscal Year	No. Sales On Record	Weighted Average Price Received Per M Bd. Ft.
1948-49 .....	95	22.49
1949-50 .....	114	23.31
1950-51 .....	138	30.76
1951-52 .....	114	33.02
1952-53 .....	100	35.53

In 1952 a survey was conducted by Reed Parker and G. H. Aull of Clemson, in one county in the state, and the results of this survey indicated that the average price of timber sold without professional advice or assistance was less than \$15 per thousand board feet. This may not be true for the entire state; how-



ever, the average price received for marked timber where a reasonably close estimate is made of the amount of timber to be cut is generally higher than the price per thousand paid where no benefit of professional assistance is obtained.

The annual Forest Management Training School was held at Burnt Gin Group Camp during the first three days of June. Special emphasis this year was placed on utilization, particularly the use of preservatives, thinning young stands and marketing. This meeting for all technical personnel was held to keep our men abreast of current and improved forestry techniques and to provide the men with an opportunity to get to know each other and discuss mutual problems.

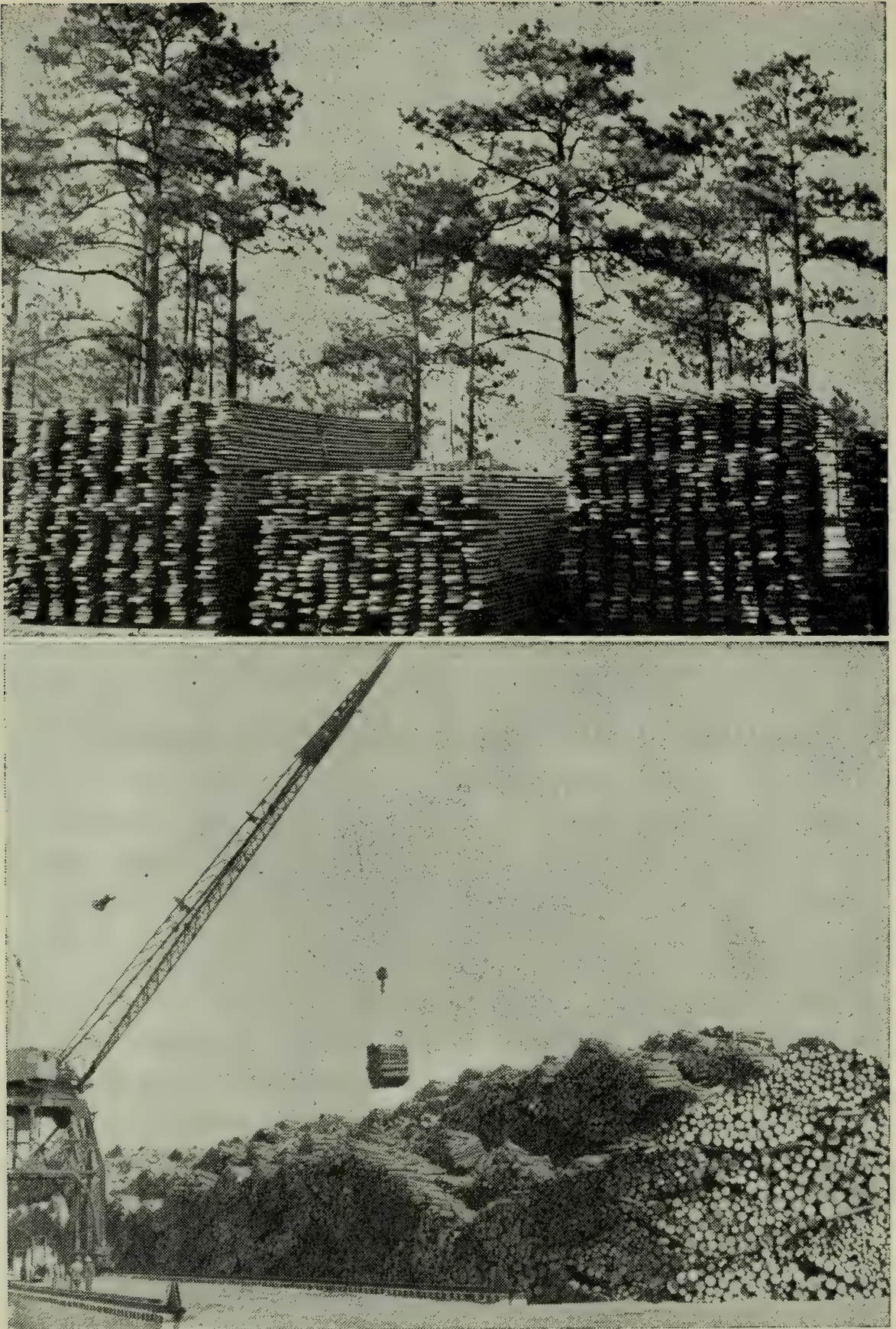
A two day sawmill school for all field foresters was held in January at Camden, under the direction of C. J. Telford from the Forest Service Laboratory, Madison, Wisconsin. It is necessary that the field foresters know considerable about general utilization in order to recommend and practice good practical forestry.

#### LUMBER AND PULPWOOD PRODUCTION BY YEARS

1942	-----	1,079,351 M bd. ft.	946,000 cords
1943	-----	984,773 M bd. ft.	985,000 cords
1944	-----	850,748 M bd. ft.	1,053,500 cords
1945	-----	723,667 M bd. ft.	877,500 cords
1946	-----	1,005,700 M bd. ft.	955,700 cords
1947	-----	871,014 M bd. ft.	948,388 cords
1948	-----	798,700 M bd. ft.	1,108,523 cords
1949	-----	1,002,000 M bd. ft. est.	1,012,180 cords
1950	-----	997,000 M bd. ft. est.	1,182,413 cords
1951	-----	1,000,000 M bd. ft. est.	1,251,045 cords
1952	-----	1,000,000 M bd. ft. est.	1,275,698 cords
1953	-----	1,000,000 M bd. ft. est.	1,270,000 cords est.

There was a definite slow-down in demand for sawtimber stumpage during the fiscal year 1952-53. This was not reflected in stumpage prices to any large degree; however, if this trend continues, it will probably result in a decrease in sawtimber prices. The production during the year apparently about equalled the production of the past two years. This would indicate that the sawtimber supply has been overcut, particularly in the





South Carolina's forests provide the basis for the state's second largest industry. One billion board feet of lumber and more than one million cords of pulpwood are harvested each year from the state's woodlands.



better logs. The average size of logs being milled is continuing to decrease. Major emphasis must be given toward growing trees to larger sizes in order to produce quality lumber. The Forestry Commission's private landowner assistance program is designed to help do this through selectively cutting.

There were few new forest products industries that began operating in South Carolina during the year. Some operators found it hard to maintain production due to competition and high cost of stumpage and high operating costs. There was also a slight decrease in the demand for low grade timber products.

A number of the larger treating companies began treating fence posts on a commercial basis during the past eighteen months. The average size post treated by these companies costs approximately 60c each; however, most of them are finding a ready market.

The forest industries that possess their own land in the state continued to show considerable interest in handling their company-owned woodlands properly. Many of the companies who do not hire full time foresters avail themselves of professional assistance by using part-time consultants, Commission or Extension foresters.

The pulp companies who obtain wood from South Carolina through their conservation departments continued to mark pulpwood for thinning on private property. According to reports received from these companies approximately one-third of the total cut of pulpwood in South Carolina is taken from thinnings and tops left from sawtimber operations. Approximately one-third of the remaining cut is from operations where minimum seed trees are left, leaving less than 40% of the pulpwood cut being taken from clear cutting operations.

Commission Foresters answered approximately 800 requests to check trees attacked by insects or diseases. Also, a three day survey was made with the cooperation of the Southeastern Experiment Station to determine whether oak wilt could be found in the state. No evidence of the wilt was found in South Carolina.



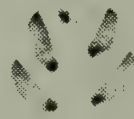
## PINE CONE AND SEED



GREEN:  
CLOSED



OPEN:  
AFTER DRYING



WITH  
WINGS



WINGS  
REMOVED

CONE

SEED



Pine seeds are planted each year to grow the millions of forest tree seedlings that are distributed to South Carolina landowners for planting to put idle acres to work growing a new crop of trees.



## REFORESTATION

A total of 22,035,850 seedlings were distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly .....	9,675,150
Slash .....	11,603,900
Longleaf .....	621,550
Arizona Cypress .....	27,550
Red Cedar .....	104,700
Oak (Experimental Planting) .....	3,000
<hr/>	
Total .....	22,035,850

An exchange was made with North Carolina, delivering 61,000 slash pine trees for 61,000 poplar seedlings to supply a number of planters in the state who particularly wanted poplar seedlings for planting on bottomland sites.

The production of trees at the Nursery this year was approximately 8,000,000 trees short of that planned. The reasons for loss were insufficient organic matter in the soils on a portion of the area planted to trees and an attack by grub worms. The grub worms cut and destroyed approximately 3,000,000 trees during the period of September 1 to October 31.

To avoid the repetition of losses from the above causes, 90 cubic yards of saw dust has been applied to most of the nursery area and a cover crop planted to be cut back into the soil. This should bring the organic content up to a satisfactory amount.

Chlorodane was applied to the entire nursery area in an effort to kill the grub worms. This has apparently been successful.

Free tree seedlings were again distributed to landowners as provided by the General Assembly. A landowner could receive up to 3,000 trees free of charge. All trees above 3,000 were paid for at the rate of \$2.50 per thousand at the Nursery or \$3 per thousand if shipped. Only 3,598,400 number of trees were distributed free.

Tables 10 and 11 in the appendix show a record of seedlings distributed by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years:

1928-29	142,000
1929-30	148,000
1930-31	986,000
1931-32	976,000
1932-33	996,000
1933-34	1,031,000
1934-35	7,529,000
1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600
1947-48	11,356,990
1948-49	30,338,775
1949-50	29,501,955
1950-51	20,615,315
1951-52	16,619,000
1952-53	22,035,850
Total	273,702,358

This was the sixth year of nursery operation at the Wedgefield site. During this time the nursery has produced and distributed 136,962,385 seedlings at an average cost of \$2.92 per thousand. The average production for this six year period was 22,827,000 trees annually. With the present facilities the nursery can maintain an annual production of 30,000,000 seedlings.

For the past year moisture meters have been installed and read to determine the amount of available moisture in the nursery soils at all times. Careful weather records and watering records also have been kept so that correlation can be made between available moisture in the soil and the amount applied through watering or rain. These records should prove beneficial for future operations.





Each year some 12,000 bushels of pine cones are collected to obtain seeds for growing pine seedlings at the Horace L. Tilghman Forest Tree Nursery.

### CONE COLLECTION

The major bottleneck to increase production of trees is the collection of seed. Approximately 12,000 bushels of cones are needed each year to provide sufficient seed for a 30,000,000 tree production. During 52-53 our field men collected 7,347 bushels of loblolly, 5,148 bushels of slash pine and 37 bushels of longleaf pine cones. In addition to the collection noted above, 600 pounds of slash pine seed, 5 pounds of shortleaf pine seed and 30 pounds of Arizona Cypress were purchased.

After planting for the 1953-54 crop 1,125 pounds of slash and 2,133 pounds of loblolly seed were carried over for next year's planting. This is about one-third of our annual requirements and it is essential that this carry-over be built up to at least one year's supply.

### COOPERATIVE FOREST MANAGEMENT

During the fiscal year eight cooperative forest management projects were operated in the state. A summary of work accomplished by C. F. M. Foresters is included with the data for each district.

## STATE FORESTS

The amount of state forest land remained the same as last year. The state forests locations and acreages are shown below:

1. Cassatt State Forest .....	462 acres
2. Harbison State Forest .....	2,202 acres
3. Manchester State Forest .....	28,830 acres
4. Sand Hills State Forest .....	92,000 acres

Prior to acquisition by the state most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed towards building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective is the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops in order to reduce the competition so that pine will survive and grow.

Detailed reports of activities on each of the State Forests follow:

### CASSATT STATE FOREST

Cassatt State Forest in Kershaw County comprises 462 acres composed largely of scrub oak and abandoned fields. The abandoned fields have been rented in the past for watermelon production. No planting was done on the forest during 1952-53. No fires occurred during 1952-53. Personnel from the Sand Hills State Forest maintained boundary firebreaks. Planting of the open fields to slash pine will be completed on this forest during the next two years.

### HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. No sales were made during the year, however, a saw timber sale planned for 1953-54. No fires occurred on the property during 1952-53.

The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the Caretaker, Mr. Roof Lowman. No fire occurred on the forest during the year. Ap-



proximately seven miles of firebreaks were maintained by Manchester State Forest personnel and equipment.

### **MANCHESTER STATE FOREST**

The 28,830 acres of land making up Manchester State Forest is located south of Wedgefield in Sumter County. This land is leased to the S. C. State Commission of Forestry on a long term lease from the Federal Government.

More than one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak and reclaiming it for pine production.

#### **Fire Protection:**

Only ten fires occurred which burned 191 acres during the year. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining the area in the prevention, pre-suppression and suppression of forest fires. A meeting of the personnel of these organizations was held at Manchester State Forest to discuss the plan.

Approximately 258 miles of firebreaks were maintained and ten miles of new firebreaks were constructed.

#### **Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. A detailed report on these two camps will be found in the Parks Division section of this report.

#### **Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services

of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

### **Agriculture:**

Forty-nine tenants rented 1,406 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the forest. Others assist when needed in the prevention and suppression of forest fires.

### **Roads and Truck Trails:**

During the year 35 miles of truck trails were machined and washes filled, a number of bridges repaired and diversion ditches cleaned.

### **Management Plan:**

The Management Plan and Stand Description Maps made for this forest in 1947 have been revised and brought up-to-date. Plans are almost complete for the periodic thinning of planted pine stands that are now approaching pulpwood size. Thinning these planted stands for pulpwood will begin in 1953-54. Saw timber sales will be made from areas where the timber is reaching maturity.

### **Tree Planting:**

A total of 85,000 trees were planted on the forest during the year. These included 50,000 slash pine, 20,000 loblolly pine, 10,000 longleaf pine, and 5,000 red cedar. Some replanting will be necessary in 1953-54 due to poor survival obtained for the past two years planting operations.

### **Forest Products Sold:**

Forest products sold during the year included the following:

Sawtimber (bd. ft.) .....	431,376
Pulpwood (cords) .....	239.48
Posts (pieces) .....	500
Fuelwood (cords) .....	207



**Telephone Lines:**

Eleven miles of telephone lines in the forest system were brushed and maintained during the year. A number of breaks were repaired and general maintenance carried out to keep the telephone system in good working order.

**Silvicultural Practices:**

The primary silvicultural activity was the reclaiming of scrub oak areas. 150 acres in Compartment 5 were cleared of scrub oak and plowed with the Athens disc plow. Results from this treatment appear to be satisfactory and economically sound. A more detailed description of this work can be found in the annual report submitted by Manchester State Forest Director.

34 acres of slash pine plantation were prescribed burned for hazard reduction, and 10 acres for undesirable hardwood control. Results were good with little apparent damages to the pine stands.

Experiments were continued in an effort to determine how long-leaf pine may best be planted.

Some new experimental areas were set up using poison for scrub oak control in conjunction with mechanical clearing of scrub oak areas. Some poisoning plots were established where scrub oak control had been started with mechanical means.

Data on other experiments already underway are being kept which include thinning experiments in young pine stands, prescribe burning treatments, and elimination of undesirable hardwood.

**Maintenance and Repair:**

A large number of small maintenance jobs were completed on tenant houses and headquarters buildings. An additional room was constructed for one tenant house and the director's residence underpinned. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair.

Considerable repair work was completed on the automotive and tractor equipment. Plans have been completed for the

purchase of a new 40 hp tractor. At least one large truck and one pickup should be traded within the next year.

### SHAW AIR FORCE BASE LEASE

The U. S. Army Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until June 30, 1962. The State Forestry Commission will be paid \$3,074 per year for this lease.

### SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of the area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease agreement.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. More than half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultural objective at present.

#### Tree Planting:

During the year only 198,000 seedlings were planted. These consist of the following:

160,000	-----	slash pine
33,000	-----	longleaf pine
5,000	-----	loblolly pine

186,000 of these trees were planted in areas cleared of scrub oak and the remaining 12,000 planted in old fields. There is approximately 500 acres of land that has been recently cleared of scrub



oak and planted to watermelon. They will be planted back to pine during the winter of 1953-54.

### **Forest Products Harvested:**

The following products were harvested from the Sand Hills State Forest during the year:

Sawtimber .....	442,403 bd. ft.
Pulpwood .....	1804.85 cords

All of the timber and pulpwood was salvaged from a disastrous burn.

### **Fire Protection:**

During the year 20 fires burned only 983 acres. This is the best fire record for the past five years. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield Unit Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

A total of 180.4 miles of firebreaks were plowed on the forest.

### **Recreation:**

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees are also held here. The lake is open to fishing but no swimming is allowed.

The Parks Division continued improvement work on Campbell's Pond, Negro State Park. This area received heavy use during the year. A more detailed report will be found in the Parks Section of this report.

**Fish and Wildlife:**

No hunting was allowed on the area during the year. Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

**Agricultural Lands:**

21 tenants rent and farm 1,500 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

During the past two years approximately 250 acres of land has been rented to watermelon growers following the clearing of scrub oak from the area. Present plans are to continue to clear scrub oak lands and rent them one year to watermelon growers and then plant them to pine.

**Roads and Truck Trails:**

During the year 85 miles of truck trails were graded, brushed out, and washes were filled in. 22 culverts were repaired and six timber bridges redecked. 40 diversion ditches were cleaned out.

**Silvicultural Practices:**

A total of 165 acres of scrub oak was cleared with the brush cutter and plowed with the Athens Plow. Eight acres of scrub oak was poisoned, using 2-4-5T as a basal spray. This area had already been planted to slash pine, however, the poison was applied since scrub oak was overtopping the pine.

A number of experimental plots have been established using various poisons and concentrations in an effort to determine the most practical method of eliminating scrub oak competition so that pine can become established.

Records were maintained on thinning plots established in 1950. Some additional thinning plots in below commercial size stands were established to determine the value of pre-commercial thinning.



**Maintenance and Repair:**

The Sugar Loaf Mountain Recreation Area was maintained and all facilities in the area are in very good condition. Considerable repairs were made to the director's residence and minor repairs made on other headquarter buildings. The general condition of headquarters and director's residence is good, however, a number of the tenant houses are in need of considerable maintenance work.

**Boundary Surveying:**

A Cadastral Engineer sent by the Atlanta Office to continue work on boundary surveys for the forest has surveyed a number of miles of boundary lines; however, there are many more miles yet to be run to completely establish our boundaries. This surveying was concentrated on areas where there was some dispute about the location of the Sand Hills State Forest lines.





Hunting Island State Park—area for whites above; area for Negroes below.



## STATE PARKS

Less than twenty years ago the State Commission of Forestry, through the Division of State Parks, set out to establish, develop and operate a system of State Parks. The goal was to provide for the people of South Carolina adequate opportunities for outdoor recreation in natural surroundings, and also to preserve and protect permanently the most important scenic, historical and scientific sites in the State.

The State Park program places emphasis not only on the recreational use of natural resources but on conserving human resources as well. It plays an important part in providing outlets for wise and wholesome use of leisure time, and thus, is instrumental in influencing lasting social benefits.

South Carolina's State Park system began with the first land acquisition in Chesterfield County in March of 1934. Myrtle Beach State Park was the first to be opened to visitors on July 1, 1936. Progress in developing a State Park system may now be measured in twenty-two State Park areas, visited by more than 3-million people annually.

The 3-million attendance figure was reached in about 16 years; it has increased six fold in the past 10 years—from ½-million in 1943 to over 3-million in 1953.

This use exceeds the anticipated planning by about three to one, and the parks as a whole, have not been able to withstand the heavy strain on the established facilities.

More than 90 per cent of the capital improvements in the several parks came into being through emergency work programs financed by the Federal Government. State-financed facilities have been extremely limited, and since the withdrawal of federal aid, very little has been accomplished in the way of capital improvements.

The 22 state parks are worth, on a replacement basis, about 12-million dollars.

It is quite possible that the attendance figure of 3-million visitors is near the saturation point for state parks in South Carolina. The inauguration of a bond-issue capital-improvements program may not draw larger crowds, but will make for more adequate accommodations for these park users, and will add to the park revenue.





Picnic shelter constructed at Little Pee Dee State Park.

It has also been determined that South Carolina has now practically achieved its goal in the *number* of state park areas, and future planning should be geared to sound development of the existing areas, rather than to the acquisition of new parks.

#### **Appropriations:**

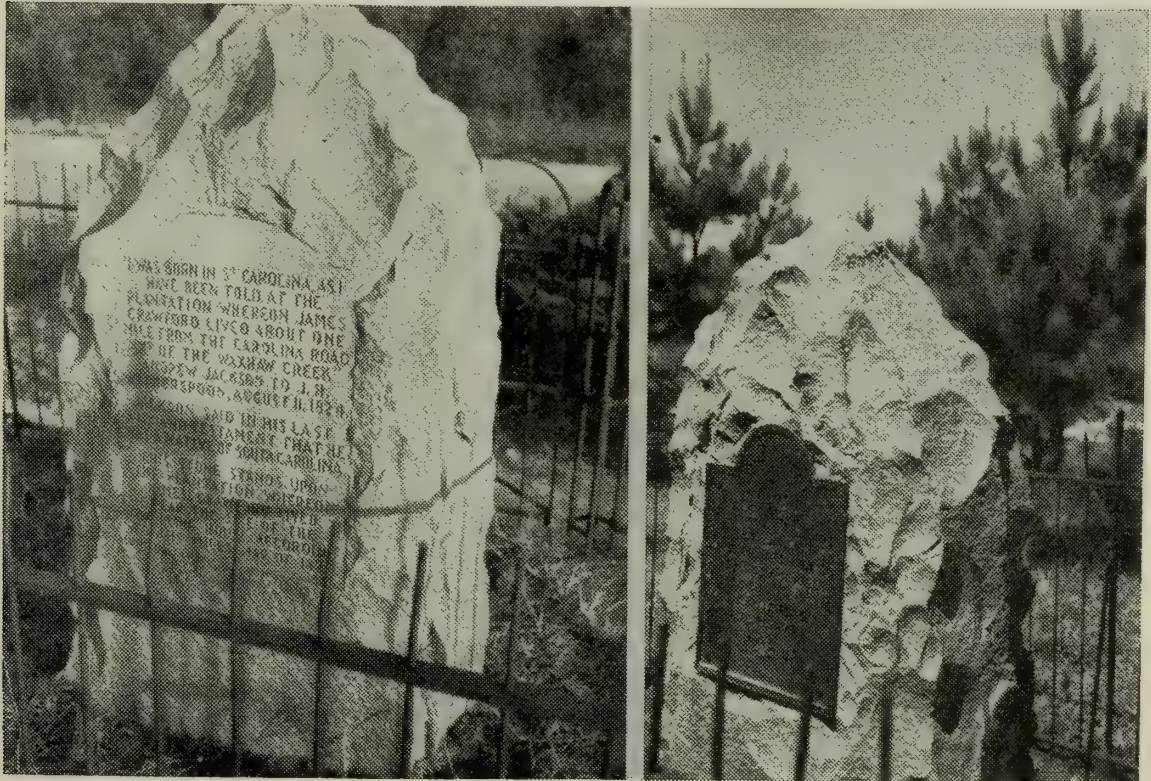
The total appropriation for State Parks for the Fiscal Year 1952-53 was \$295,877.

This amount is not adequate to finance the operation of a state park system of the scope of South Carolina's. From this appropriation must come all salaries, costs of all operations, maintenance and replacement of equipment and all repairs of equipment and buildings. The needed appropriation is \$350,000. This figure is readily justified on a basis of extent of use, number of facilities, areas, and by depreciation and maintenance costs schedules. The national average per park visitor cost for state parks is 19 cents; South Carolina's is less than 10 cents.





Re-roofing and renovating Ben S. Meeks Lodge at Table Rock State Park was one of the major repair jobs accomplished during the year.



A granite monument at Andrew Jackson Historical State Park marks the birthplace of the 7th President of the United States.



### Acquisition of New Area:

During the fiscal year the Commission received title to 357 acres of land in upper Lancaster County which embraces the area of the birthplace of Andrew Jackson, 7th President of the United States. This area will be developed into an historical state park. The construction at this site of buildings true to the architecture and pattern of Andrew Jackson's time and of the customs of the Waxhaws and the frontier man's life, will re-create an atmosphere of the years between 1750 and 1850 and be a new phase in state park development—an historical state park.

The twenty-two State Parks, with their acreage, location, date established or acquired, and date opened to visitors, are shown below:

Park Name	Acreage	Location-County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	867	Aiken .....	July 1934	Aug. 1936
Andrew Jackson Historical..	357	Lancaster .....		Under construction
Barnwell .....	252	Barnwell .....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield .....	March 1934	July 1939
Chester .....	523	Chester .....	May 1935	July 1939
Croft .....	7,135	Spartanburg .....	May 1949	June 1949
Edisto .....	1,255	Charleston .....	Feb. 1935	June 1937
Givhans Ferry.....	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood .....	1,114	Greenwood .....	April 1938	July 1940
Hunting Island.....	5,000	Beaufort .....	July 1938	June 1941
Kings Mountain.....	6,141	York-Cherokee .....	Nov. 1934	June 1940
Lee .....	2,839	Lee .....	June 1935	June 1941
Little Pee Dee.....	835	Dillon .....	June 1951	Under construction
Myrtle Beach.....	312	Horry .....	Aug. 1934	July 1936
Oconee .....	1,165	Oconee .....	July 1935	June 1937
Paris Mountain.....	1,275	Greenville .....	April 1935	June 1937
Pleasant Ridge.....	300	Greenville .....	Sept. 1950	Under construction
Poinsett .....	1,000	Sumter .....	Aug. 1934	Aug. 1936
Rivers Bridge.....	390	Bamberg .....	May 1945	July 1945
Santee .....	2,364	Orangeburg .....	Jan. 1942	June 1949
Sesqui-Centennial.....	1,500	Richland .....	Aug. 1937	June 1940
Table Rock .....	2,860	Pickens .....	May 1935	June 1940
		46,080		

The Commission of Forestry also administers one wayside park and seven historical areas:

Colleton Wayside, Colleton County  
 Eutaw Springs, Orangeburg County  
 Ft. Watson, Clarendon County  
 Thomas Sumter Burial Site, Sumter County

Burial places of:

Gen. Francis Marion, Berkeley County  
 Col. Isaac Hayne, Colleton County  
 Thomas Heyward, Jasper County  
 Gen. Andrew Pickens, Pickens County



### **State Park Areas for Negroes:**

There are five state parks for the exclusive use of Negroes. At Greenwood and Hunting Island portions of these parks are so designated. At Cheraw and Poinsett State Parks there are nearby areas—Campbells Pond and Mill Creek. And in the mountains of Greenville County there is a new park under construction—Pleasant Ridge Negro State Park.

Within these parks are swimming beaches and bathhouses, picnic tables, grills, shelters, playfields, fishing lakes, toilet facilities; and at Mill Creek in Sumter County is a group camp for Negro youths.

### **Groin Construction at Beach Parks:**

Two additional groins of creosoted timbers were constructed at Hunting Island State Park in front of the white bathhouse. These groins replaced the original experimental groins built of palmetto logs. This gives Hunting Island six groins, four in the white area and two in the area designated for Negroes.

The single groin at Edisto Beach State Park is producing noticeable results in building back the beach line at the bathing area.

There is no beach erosion at Myrtle Beach State Park.

### **The Ranger Parks Radio Broadcasts:**

The Ranger Parks "school-of-the-air" radio series is an activity designed to develop a better understanding and appreciation of the state park areas, and to teach certain conservation concepts. This series of radio programs has been produced by the Division of State Parks for the past three school years. During the year just ended 28 weekly 15-minute programs were broadcast by 9 radio stations in South Carolina. The programs are designed for in-school listening and have been welcomed by many teachers as a valuable aid to teaching. Manuals are prepared to help teachers use the programs more effectively. This activity is one of the interpretive functions of the Division of State Parks.

### **Organized Camping Activities:**

Youth groups are looking more and more to the facilities in the state parks for the promotion of their programs. All summer



long the organized camping areas are crowded with boys and girls spending from one to four weeks in play and study in the out of doors.



Girl Scouts from Britain camped with South Carolina Girl Scouts at Camp Forest, Cheraw State Park.

Church groups, Boy and Girl Scouts, YMCA and YWCA groups, schools and colleges, industrial and private agencies, have reserved the seven camps at four state parks for their summer programs. Camp Juniper and Camp Forest are located at Cheraw State Park; Camp York and Camp Cherokee are at Kings Mountain State Park; Camp Buckhorn is above Greenville at Paris Mountain State Park. Mill Creek Group Camp for Negroes and Burnt Gin Group Camp are at Poinsett State Park.

These seven camps can accommodate a total of 550 campers and were occupied almost to capacity throughout the summer. This use, coupled with spring and fall outings, makes a total attendance of approximately 38,000 camper days.

Public Schools are giving consideration of moving some of their classes out of doors and are going into the State Parks for extracurricular activities. This is especially true of the Greenville



City School system who regularly use Paris Mountain and Table Rock State Parks for school studies.

The State received 30 cents per day per camper for the use of these facilities. This charge enables many boys and girls to have a camping experience who could not otherwise afford it, and in some cases the sponsoring agency pays all of the fee for certain underprivileged groups.

#### **Historical Areas:**

The Division of State Parks is charged by the Legislature to maintain seven historical areas within the State and a special appropriation is made for the purpose.

The Fort Watson Memorial, an Indian mound in Clarendon County; the General Thomas Sumter burial area in Sumter County; and the Eutaw Springs Historical Site in Orangeburg County, were deeded to the Commission of Forestry and a definite program of maintenance is in operation.

The burial place of General Francis Marion at old Bell Isle Plantation in Berkeley County; and the burial sites of Col. Isaac Hayne in Colleton County, and Thomas Heyward in Jasper County are in private ownership and receive clean-up attention from the Commission.

General Andrew Pickens is buried in the Old Stone Churchyard at Clemson and this shrine is also administered by the Commission.

## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Negro Areas
AIKEN STATE PARK Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x		
†ANDREW JACKSON HISTORICAL STATE PARK Lancaster, S. C., RFD.....																	
BARNWELL STATE PARK Blackville, S. C.....	x	x	x	x	x	x	x				x		x		x		
CHERAW STATE PARK Cheraw, S. C.....	x	x	x	x	x	x	x	x			x		x	x	x	x	x
CHESTER STATE PARK Chester, S. C.....	x	x				x	x				x				x		
CROFT STATE PARK Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x		
EDISTO BEACH STATE PARK Edisto Island, S. C.....	x	x	x	x	x	x	x	x					x		x		
GIVHANS FERRY STATE PARK Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x		
GREENWOOD STATE PARK Ninety Six, S. C., RFD.....	x	x				x	x						x		x		x
HUNTING ISLAND STATE PARK Frogmore, S. C.....	x	x		x	x	x	x						x		x		x
KINGS MOUNTAIN STATE PARK Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x	
LEE STATE PARK Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x		
LITTLE PEE DEE STATE PARK..... Dillon, S. C.....	x	x															
MYRTLE BEACH STATE PARK Myrtle Beach, S. C.....	x	x		x	x		x	x		x	x		x		x		
OCONEE STATE PARK Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x	x	x		
PARIS MOUNTAIN STATE PARK Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x	
PLEASANT RIDGE STATE PARK (For Negroes) Cleveland, S. C.....	x	x															x
POINSETT STATE PARK Wedgefield, S. C.....	x	x	x	x	x	x	x	x				x	x		x	x	x
RIVERS BRIDGE CONFEDERATE MEMORIAL STATE PARK Ehrhardt, S. C., RFD.....	x	x		x	x	x	x						x		x		
SANTEE STATE PARK Elloree, S. C., RFD.....	x	x		x	x	x	x						x		x		
SESQUI-CENTENNIAL STATE PARK Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x		
TABLE ROCK STATE PARK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x		

Note: For overnight CAMPING, write in advance to Park Superintendent.

\* Where no regular Barbecue Pit and shelter are established temporary arrangements can be made at all Parks.

† Acquisition only.



## RECOMMENDATIONS

To the 1954 Legislature we respectfully make the following recommendations:

1. Make available an adequate budget for the increased operation of 22 State Parks, and to include especially items:
  - (a) sufficient to offset depreciation of buildings, installations and equipment;
  - (b) to supplement the number of personnel at four state parks; and
  - (c) to provide pay increases to certain labor and summer personnel, not considered in last year's 8-1/3 per cent general increase.
2. Re-enact the capital-improvement-for-state-parks section of the 1953 general appropriation bill. Under this provision revenue from the park operations could be used to retire notes and bonds issued to finance capital improvements.
3. While it has been repeatedly stated that the areas comprising the State Park system are generally adequate to serve the people of South Carolina, the following are exceptions to this generalization:
  - (a) Two additional state parks for use by Negroes are urgently needed—one in the Charleston area and another in the vicinity of Columbia.
  - (b) Next in order for a state park for whites should be the area centering around Williamsburg County.
  - (c) The development of the two acquired areas on the Clarks Hill Reservoir, Baker Creek for whites and Hickory Knob State Park for Negroes, should follow in a third priority position.





The State Commission of Forestry at the 1952 State Fair displayed exhibits on Forestry and State Parks. Flashing lights and bouncing dollars dramatized the value of our woodland to every South Carolinian. A state park scene featured a waterfall tumbling into a sunken pool containing live bass and bream. A rocked-up drinking fountain and state park lawn chairs were provided for the convenience of fair-goers.



# INFORMATION AND EDUCATION

## INTRODUCTION

Since the Legislative Act creating the State Commission of Forestry in 1927 stated that the Commission's purpose was "to inform the people of the state as to the forest conditions," the guiding principle has been approaching forest conservation problems through education. The wisdom of this language is attested by the fact that 93% of the forest land in South Carolina is in private ownership. This means people must know forestry facts and techniques before problems can be solved. The need for the solution of these problems is given emphasis by the value of the production from forest lands to the general economy of the state. According to the "Blue Book of Southern Progress," published by the Manufacturer's Record for 1953, the value of forest products in South Carolina in 1952 amounted to 349 million dollars. It is second in economic importance only to textiles.

The current contribution to the state's economy is made from woodlands which are producing less than half of their potential capacity. When people realize the potential value of woodland production and apply practical methods of the wise use and production of these resources, the amount of wood available for commercial use could be more than doubled. Practically all of the problems of forest conservation in South Carolina can be solved only through the efforts of the people who own this land and the general public who have their individual responsibility in the protection of these vital raw materials.

With the adoption of known techniques in forest conservation not only would the future supply of existing wood-using industries be assured, but also the supply would permit an expansion of this important part of the economy of South Carolina.

The fiscal year 1952-53 covered by this report marks the beginning of the second quarter century of the Commission's service to the people in South Carolina. While concrete progress has been made over the past 25 years, the philosophy of the Commission today is looking ahead to the solution of problems as they exist at the present time.

Briefly stated, these problems are:

1. Forest Fire Protection.

More than 5,000 illegal woods fires occur every year in South Carolina.

Landowners burn their own woods in all too many cases.

2. Unwise cutting practices mean low production and inferior quality raw products.

3. Some 11½ million acres of idle land or unproductive forest land should be planted to trees.

4. Species of inferior quality occupy much of the existing forest land in the state. These inferior trees must be replaced with trees of good quality to achieve full woodland production.

The elements of the Commission's information and education program are designed to inform landowners as to ways and means by which these problems can be solved. In addition to the responsibility the landowner has to his property the general public must be constantly aware of the need for care in protecting this vital part of our economy from woods fires.

### FOREST FIRE PREVENTION

As the Commission entered its first year of the second quarter century of service to the people of South Carolina it became even clearer that the forest fire problem could never be solved in the state without an intensive educational program of forest fire prevention. In June, 1950 the decision had been made to direct major emphasis to the damage caused by the average slow burning quiet fire that South Carolinians were accustomed to seeing. This damage was emphasized in terms of little trees hidden from the eye of the casual observer and destroyed in any fire that would burn the grass, and woods litter close to the ground.

This approach after three years has proved to be the most effective method of conveying the need for forest fire prevention in the state. It was clear at the outset that the program be developed and carried out by the Commission. It was also clear that it could only be done through the support and active cooperation of many other groups within the state. There was also the need for assistance on the part of other organizations producing fire



prevention materials on a national and a regional scale that are to be used in South Carolina.

From the development from the basic idea that "Even little fires kill little trees" in June 1950, the program has gradually grown with the development of educational materials such as printed matter and audio visual materials. Probably the most effective single production was the film "By Our Own Hand" produced by the State Commission of Forestry in sound and color in October 1951. This film tells the basic story in less than four minutes and has been widely used either by itself or attached to other films dealing with other phases of forest conservation. During the same month, the Commission produced the photograph of the hand behind the little tree which has been used widely in South Carolina and has also had regional and national distribution. This photograph crystalizes the thinking of the Commission's approach in forest fire prevention.

Other materials accumulated to facilitate this program during the last three years were three colorful posters addressing this message to 1) school children, 2) landowners, and 3) the man who strikes the match.

During 1952-53 county forest fire fighting personnel continued the use of lectures illustrated with colored slides dealing with forest conservation generally but with particular reference to the need for protecting little trees. Other materials were developed during this fiscal year which should make the work of these personnel far more effective as time goes on.

In cooperation with the State School Book Commission the Forestry Commission produced an effective illustrated message for schoolbook covers used by some quarter of a million school children in South Carolina. The schoolbook cover carried a State Parks message on one side and on the other a four-color reproduction of the Commission photograph of the hand behind the little tree with the message "For Your Future and Our Nation's Strength—Lend Nature A Hand Protect Little Trees." With children seeing this message every school day of the year it should encourage increased respect for property rights of others as well as a greater appreciation for the future value of their woodlands at home. This project should also serve to prepare school children for illustrated lectures which rangers and wardens give to classrooms. A color reproduction of the photograph of the hand and

little tree suitable for framing for the classroom carries the same message.

In order to reach the general public with this message, three major teaching devices were prepared to put into the overall prevention program. A wall calendar for 1954 carries a color photograph of the hand and little tree with the message "Protect little Trees-Lend Nature A Hand." This calendar was designed for use in crossroad stores in areas of South Carolina where fire hazard is the greatest. As the calendar is presented to the storekeeper it's connection with the prevention program is explained. In order to illustrate the major point of emphasis more clearly, each ranger and warden had prepared for him a little pine seedling embedded in clear plastic. This enables the storekeeper to better visualize the need for protecting a tender seedling from fire and it also helps him to realize its potential value to the economy of his community if protected and allowed to grow to marketable size. This approach should enable the storekeeper to discuss the calendar on his wall more intelligently and with greater effectiveness.

In making personal contacts with landowners, timber buyers, those who use woodland areas for recreational purposes, and other leaders in a community, Commission personnel have found that the little tree in plastic is an exceptionally effective educational device. After displaying the model of the little tree and telling the story of its importance, a pocket calendar carrying a color photograph of the little tree is given to the person as a reminder and also as a clear illustration for him to use in widening the circle of information on the need for forest fire prevention in South Carolina. Usefulness and interest is increased because it is also a fishing calendar.

All of these items carry the same general theme and should enable the Commission to dramatize fire prevention far more effectively than at any previous time in the history of the Commission.

Person to person selling is just as important in the field of fire prevention as it is in the selling of any idea, product or commodity. The little tree theme is important for the reason that most people do not realize its existence until it at least gets well above the grass stage. Of course, the woods fires cause other damages too, but they are not so readily apparent. Even close



observers of the growth of timber in South Carolina are misled by the fact that in the spring nature appears to completely heal wounds of previous woods fires during the fall and winter. Therefore, it is believed imperative that the irrefutable argument "even little fires kill little trees" should be used as the logic for fire prevention. It provides the inescapable "reason why."

A major contribution to the forest fire prevention program in South Carolina was made on February 26, 1953 when the South Carolina Forest Industries Committee launched KEEP SOUTH CAROLINA GREEN. This industry committee is made up of leading representatives of the industries of South Carolina that use wood as a primary raw product. It is representative of all major users of wood as a business. The State Commission of Forestry welcomes the organization of this committee and its program of forest fire prevention. It is designed as a citizens movement that enlists the cooperation and support of a host of groups of people as well as the general public in South Carolina. It is basically an educational approach and the State Commission of Forestry commends this committee for its acceptance of the fire prevention philosophy which the Commission has proven to be effective in the approach to the problem. Woods fires in South Carolina are the result of carelessness or misguided intent of people. Therefore, to reduce the more than 5,000 woods fires occurring annually in South Carolina, it is people who must be reached with convincing argument that fire damages woodlands and that financial loss to the landowner and to the economy of the state are the results.

The Commission is cooperating with this movement wherever possible and is publicly supporting the movement for the reason that it will require the best possible coordinated program of educating the public for forest fire prevention to succeed.

This means that all forces engaged in fire prevention education should tell substantially the same story particularly in view of the high incidents of woods fires which are set on purpose. If carelessness were the only factor it would not be quite so imperative that coordinated argument be used. From a nationwide viewpoint, most fires are started as a result of carelessness, but since nearly half of the fires in South Carolina are intentionally set irrefutable logic must be used as to why fires should be prevented.

The KEEP SOUTH CAROLINA GREEN movement has accepted the little tree approach in developing its argument for fire prevention. This acceptance has resulted in the expression of the idea in a number of ways. One of the most important examples is the development of the seal used in KEEP SOUTH CAROLINA GREEN materials. With the growing interest of the people of South Carolina in this movement the future display of this seal can be expected to reach a large percentage of the people in the state.

During 1952-53, as in years past, the Commission cooperated actively in the national campaign to prevent forest fires conducted by the committee of U. S. Forest Service Officials and State Foresters in individual states. It is one of the several campaigns guided by the Advertising Council, Inc., a non-profit organization formed and backed by American business for the purpose of conducting campaigns for the welfare of the nation. Foote, Cone and Belding, a well known advertising agency of Los Angeles, California volunteers time and service free of charge in taking their assignment from the Advertising Council to make the Cooperative Forest Fire Prevention Campaign possible. Of outstanding importance in assisting with the local fire problem in South Carolina Foote, Cone and Belding prepared a nationwide large advertisement to be sponsored by local sponsors. During 1952-53 West Virginia Pulp and Paper Company made effective use of this advertisement in a dozen newspapers in South Carolina. The State Commission of Forestry photograph of the hand behind the little tree was the basic element used in the production of this national ad.

In addition to this type of assistance the national campaign through the ever increasing use and acceptance of Smokey Bear provided invaluable aids to the fire prevention program in the state. Smokey Bear has become a symbol for children and adults alike for the positive measures man is taking in preventing the destructive force of forest fire.

### FORESTRY DEMONSTRATIONS

A demonstration is an effective way to get forestry information before the people. During a demonstration the actual forestry practice, whether it be fire control, reforestation, cutting or other activities, is carried out on the ground. For example, if the



# TINY—but important beyond words!



Each year thousands of insignificant-looking fires—low, slow-burning ones—creep through the grass or brush-covered floors of our forests and woods. They don't often kill the big trees. They seem to do little or no damage.

There's just one catch.

Down in that grass and brush are tiny trees—the future woods and forests of America—the timber that your children will urgently

need in the years to come. Fire kills these small trees.

Yes, it is mighty important that we prevent those "insignificant" fires. For they are forest fires, too... just as destructive, just as costly.

For America, for your children, please be careful—extra careful—with matches, smokes, campfires. Think of those tiny trees... hidden in the grass.

## Remember—only you can PREVENT FOREST FIRES!

Like other American business firms, we believe that business has a responsibility to contribute to the public welfare. This advertisement is therefore sponsored in cooperation with The Advertising Council and U. S. and State Forest Services by:

SPONSOR'S NAME

The Commission's photograph of the hand behind the little tree once again attained national prominence. Through the cooperation of the Advertising Council, the above newspaper advertisement was made a part of the nationwide Cooperative Forest Fire Prevention Campaign for 1953.





Boy Scouts at Camp Ho-nan-wah, Charleston County observe a demonstration of a half track plowing a fire break with the Commission's C-150 plow.

demonstration concerns planting, the group is taken through the planting process step by step with demonstrations and explanations. To complete the demonstration, printed material on planting is given each person present. Demonstrations on other phases of forestry are conducted in a similar manner.

During the year 1,608 persons attended 76 demonstrations conducted by personnel of the Forestry Commission on forest fire protection, correct cutting methods, reforestation, and other forestry activities.

### CONSERVATION WEEK AND ARBOR DAY

Conservation week is the one week during the year that is especially set aside to call to the attention of all our people the necessity of wise use of all our natural resources. According to South Carolina law the first Friday in December is observed as Arbor Day and the Week in which that Friday occurs is observed as Conservation Week.

Many people, agencies, and organizations cooperate each year to make Conservation Week a success. The Garden Clubs and the



Federated Women's Clubs of South Carolina sponsor the observance of Conservation Week with the Commission of Forestry. Clemson College Extension Service, the Soil Conservation Service, the State Department of Education, newspapers, radio stations, and other groups cooperate in placing the challenge of Conservation before the people of South Carolina.

Realizing that special school materials are needed during Conservation Week, the Forestry Commission prepares a special issue of "Forestry and Park Notes" each year. This is distributed to schools, churches, civic and patriotic organizations and other interested groups.

Personnel of the Forestry Commission and other cooperating groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

A total of 1,103 Conservation Week and Arbor Day programs were held, with 87,398 persons attending.

### **TOWERSITE IMPROVEMENT CONTEST**

The annual towersite improvement contest is held to encourage a complete "live-at-home" program, and to improve and develop the small areas of state-owned land that make up the tower sites, located over the state.

Because of the necessity of locating towers on high points, many tower sites are on poor, unproductive land. The contest has encouraged towermen to build up, develop and beautify even the worst of these areas, while, at the same time, making a better living for his family and himself.

During the year, the towermen and their families plant flowers, grass and shrubs, grow and can vegetables and fruit, raise livestock and poultry, keep the towers and other buildings clean and in as good condition as funds for repair permit as well as keeping a sharp lookout for woods fires.

This year the following winners were selected:

Mrs. Eva C. McCoy, Lookout towerlady at Bonneau Tower in Berkeley County, 1st State Prize.

William J. Page of Big Knob Tower in Laurens County, 2nd State Prize.

Miss Isabel Edwards of Rowesville Tower in Orangeburg County, 3rd State Prize.

Mrs. Clara Morgan and Mrs. Odessa T. Thrift of Oakway Tower in Oconee County, 4th State Prize.

Each of these towermen also won first prize in the contest in the forestry district in which the towers are located.

Other district winners were:

G. Percival Kolb, Black River Tower in Sumter County, 1st Camden District prize; E. B. Wilson, Philadelphia Tower in Darlington County, 1st Florence District prize; Willie R. Bishop, Cane Branch Tower in Colleton County, 1st Walterboro District prize; Mrs. Eda F. Peeples, Luray Tower in Allendale County, 2nd Orangeburg District prize; Lee Andrew Nesbitt, Atkins Tower in Lee County, 2nd Camden District prize; S. W. Mixon, Lanes Tower in Williamsburg County, 2nd Kingstree District prize; Mrs. Louise Cottingham, Latta Tower in Dillon County, 2nd Florence District prize; Mrs. Myrtle L. King, Simpson Tower in Fairfield County tied for 2nd Newberry District prize with Saluda Tower; Mrs. Adell Adams, Saluda Tower in Saluda County, tied for 2nd Newberry District prize with Simpson Tower; Mrs. E. L. Burgess, Cleveland Tower in Greenville County, 2nd Spartanburg District prize; and Mrs. Thelma Garvin, Adams Run Tower in Charleston County, 2nd Walterboro District prize.

## MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement lectures or talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus.

Films on forest fire control, forest management, reforestation and other forestry subjects were shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others. During the year 728 showings were made to 48,131 people.

In October, 1951 the Information and Education Branch produced a special 4-minute motion picture in color and sound to focus attention on little trees to help carry out the theme of the Commission's forest fire prevention program. It was entitled "By Our Own Hand" and has been used extensively by itself or with other films. Other southern states have expressed an interest in adapting this film to their own conditions, and several



states have had copies made for their use with the approval of the S. C. State Commission of Forestry.

County Agents of the Clemson College Extension Service held showings of this film as part of their educational work.

### VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

An excellent means of getting forestry information to many people is through the school forestry program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. For several years forestry training schools were held for all vocational agriculture teachers in the state. They learned the latest methods of forest fire protection, reforestation and forest management at these meetings conducted by foresters of the State Commission of Forestry. The teachers have carried the information back to their students who use it in their work on school forests and on home forestry projects.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut—which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes.

The Forestry Commission sponsors the School Forest Contest, awarding modest prizes to the schools and teachers who have the best school forests. This year the following schools were awarded prizes in the contest:

The St. George High School FFA Chapter won first prize in the lower-state division. The Pendleton High School FFA Chapter won first prize in the upper-state division. The Walterboro

High School FFA Chapter won second prize in the low-country division. The Edgefield High School FFA Chapter and the Blackstock High School FFA Chapter tied for second place in the upper state division.

The Vocational Agriculture Teachers of the winning schools were also awarded prizes.

The goal of the Forestry Commission and the Division of Vocational Agriculture is to have at least one school forest in each county in the State. They are valuable as demonstration areas and teaching aids, and they stimulate much interest among the people of the community. In some cases groups of townspeople have gone to agriculture teachers and have asked for a detailed explanation of the activities being carried on on the forest.

### RESOURCE-USE EDUCATION

The Resource-Use Education movement has stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the State Parks for this purpose. It has been demonstrated that using these facilities and camping on school time creates a very effective teaching situation.

The State Commission of Forestry welcomes this instructional use of state parks, and Commission personnel cooperated with several groups during the year to develop worthwhile projects in day camping and school camping at the state parks.

During the year the conservation committee of the South Carolina State Chamber of Commerce continued work on a Conservation Source Book as one phase of a project to encourage the teaching of conservation in the schools of the state. The State Commission of Forestry with the cooperation of foresters of other agencies prepared the basic information for the section dealing with Forest Conservation.

### TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and state parks before many groups. The quality of talks improved considerably during the year due to training, and the use of colored slides with the talks



undoubtedly made the talks much more interesting. The Commission's Branch of Information and Education has nearly 2,000 colored slides on various phases of forestry and state park activities. The slides are available to all members of the organization and they have been used to illustrate talks and lectures as well as for training aids during personnel training sessions.

During the year a total of 2,214 talks were made by Commission personnel to 93,390 people. Garden clubs, church groups, school groups, civic and patriotic organizations were among those requesting talks.

### EXHIBITS

Forestry Commission personnel welcomed the many requests by county fair organizations, garden clubs, church, school and other groups for educational forestry and state park exhibits because they provide an excellent opportunity for placing forestry and state park information before the people.

The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits where practicable in an effort to attract the attention of people attending fairs and special gatherings.

Until the past several years an exhibit was rarely requested except for state and county fairs. During this year, garden clubs and other groups requested exhibits regularly throughout the year. This is an indication of interest in forestry and state parks activities by various groups of people.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and state park information through personal contacts by Commission personnel on duty and through the distribution of literature.

The following is a record of exhibits displayed:

# RECORD OF EXHIBITS

Location of Exhibit—County Fairs:	Type of Exhibit	Estimated Attendance
Kingstree (Williamsburg).....	"Look at the Difference".....	3,500
Bennettsville (Marlboro).....	"Join the Fire Fighting Team".....	5,000
Newberry .....	"The Thinking Behind Fire Protection".....	24,000
Greenville .....	"Look at the Difference".....	29,000
Easley (Pickens).....	"Woodlands That Pay".....	15,000
Union .....	"Planted by Nature or by Man—Protect Little Trees" .....	27,300
Chester .....	"Forest Enemy Number 1—Fire".....	13,000
Laurens .....	"It Takes Men to Fight Forest Fires".....	20,000
Anderson .....	"Woodlands That Pay".....	80,000
Chester (c).....	"Forest Enemy Number 1—Fire".....	8,000
Greenwood .....	"The Thinking Behind Fire Protection".....	27,000
Camden (Kershaw).....	Automatic Slide Projector.....	15,000
Orangeburg .....	"It Takes Men to Fight Forest Fires".....	28,000
Spartanburg Piedmont Inter-state....	"Look at the Difference".....	10,000
Rock Hill (York).....	"Forest Enemy Number 1—Fire".....	8,000
McCormick .....	"Woodlands That Pay".....	3,250
Lancaster .....	"Look at the Difference".....	10,000
Walterboro (Colleton).....	"It Takes Men to Fight Forest Fires".....	5,000
Conway (Horry).....	"Equipment Saves Time and Timber".....	3,000
Bishopville (Lee).....	Automatic Slide Projector.....	6,000
Manning (Clarendon).....	"Forest Enemy Number 1—Fire".....	3,500
Charleston .....	"It Takes Men to Fight Forest Fires".....	40,000
Florence .....	"Protect Little Trees—Grow Timber Dollars".....	10,000
Moncks Corner (Berkeley).....	Smokey Cut-out.....	6,000
Loris (Horry).....	"Woodlands That Pay".....	5,000
Marion .....	"Equipment Saves Time and Timber".....	22,000
Dillon .....	"Look at the Difference".....	3,000
Charleston (c).....	"It Takes Men to Fight Forest Fires".....	20,000
Sumter .....	"Nature's Gift".....	25,000
Camden (c).....	Automatic Slide Projector.....	8,000
Lancaster (c).....	"Equipment Saves Time and Labor".....	4,000
Florence (c).....	"Protect Little Trees—Grow Timber Dollars".....	10,000
Sumter (c).....	"Nature's Gift".....	12,000
Aiken .....	"Nature's Gift".....	15,000
Latta (Dillon) (c).....	Smokey Display.....	3,000
Total.....		526,550
<b>State Fair:</b>		
Columbia .....	"Enjoy Your State Parks" and "Protect Little Trees—Grow Timber Dollars".....	200,000
Columbia (c) .....	"Enjoy Your State Parks" and Special Murals on Forestry.....	80,000
Total.....		280,000
<b>Exhibits other than County or State Fairs:</b>		
Columbia (Spring Flower Show).....	Miniature 1952 State Fair Exhibit.....	3,000
Clemson Farm and Home Week.....	"The Thinking Behind Fire Prevention".....	35,000
Dentsville Community Fair.....	"State Parks Are Yours to Enjoy".....	2,000
Board Meetings (8).....	"The Thinking Behind Fire Prevention".....	400
Myrtle Beach (Soil Conservation Service).....	"The Thinking Behind Fire Prevention".....	500
Asheville, N. C. (Lumber Dealers Association).....	Miniature 1952 State Fair Exhibit.....	1,000
Kingstree R. E. A. Electric Fair.....	Fire Prevention Exhibit.....	2,000
Horry County Electric Fair.....	Miniature 1952 State Fair Exhibit.....	1,500
Charleston (Garden Club).....	Miniature 1952 State Fair Exhibit.....	500
Spartanburg (Garden Club).....	Photo Mural—Values from little Trees.....	5,000
St. George (Garden Club).....	Automatic Slide Projector.....	250
Anderson (Garden Club).....	"The Thinking Behind Fire Prevention".....	1,000
Orangeburg (Garden Club).....	Miniature 1952 State Fair Exhibit.....	1,000
Lancaster Merit Badge Show.....	Photo Murals.....	2,000
Dillon (Garden Club at Presbyterian Church).....	Smokey and Pine Seedlings.....	750
Dillon (Garden Club at Methodist Church).....	Smokey and Wildlife.....	700
Greenwood (Window display).....	Management posters.....	6,000
Charleston (Boy Scout Camporee)....	"The Thinking Behind Fire Prevention".....	400
Winnsboro (Cook Theatre).....	Photo Mural—Fire Protection.....	1,000
Westminster (High School).....	Posters—Fire Control.....	5,000
Total .....		69,000
<b>GRAND TOTAL.....</b>		<b>875,550</b>

Note (c): Colored



## RADIO AND TELEVISION

Radio and television are valuable for getting forestry and state park information to large numbers of people.

Radio stations in South Carolina have generously cooperated in the past with the Commission by providing air time for presenting information on forest fire prevention and other phases of forestry, as well as information on state park facilities. As television stations come on the air in South Carolina, they will provide still another means of bringing to the people information on forestry and state parks.

Several districts have regularly scheduled programs on various radio stations. All districts have used radio to some extent. Many rangers are making use of local radio stations to give warnings of periods of high fire danger, to give tips on how to prevent fires, and to present other information on forestry.

During the year the recorded series "Jelly Elliott and the Three Knotheads" was broadcast by 25 radio stations. These programs, produced as part of the nationwide Cooperative Forest Fire Prevention Campaign, have been very popular in South Carolina, and several stations have repeated the series. This year's series of 13 programs combined Hill-billy and folk music with stories and messages on forest fire prevention and on other phases of forestry.

A number of other platters produced as part of the Cooperative Forest Fire Prevention Campaign were also used by many radio stations. These platters contain short spot announcements and fire prevention messages for use during station breaks.

The "Ranger Parks" school-of-the-air series of radio programs in nature, science, history, and conservation was produced by the Commission for the third consecutive school year. The 28 15-minute programs in this year's series were broadcast by 9 radio stations in South Carolina. The programs are designed particularly for in-school listening by students in the upper elementary and the junior high school grades. The programs attempt to teach principles of conservation, forestry, and state park use. Many encouraging comments from school children, teachers, and others indicate that the programs are accomplishing this purpose. A 32-page teachers manual was prepared and distributed to help teachers use the programs more effectively as teaching aids.

The Commission of Forestry plans to continue using radio and television facilities to help do the job of informing and educating in the fields of forestry and state parks in South Carolina.

## TRAINING

The past year has seen a marked increase in appreciation of the place that every employee of the Forestry Commission has in doing the education job. Because the Forestry Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has paid untold benefits and has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective, talks and slide lectures in all phases of our work are more interesting and to the point. During district fire control training meetings, district and county unit personnel are trained to make the most effective use of materials they have to work with. This past year a great deal of time and training was spent on the new fire prevention plan and the new slide projectors which would be in use in every county. Stress was laid on the fact that the forest fire prevention program and an expanded forest management program depended on the effectiveness of the selling job of each member of the organization in his respective community.

The training of the Commission's technical foresters included a 4-day forest management training school conducted by the Branch of Forest Management at Burnt Gin Group Camp on Manchester State Forest. Training at this meeting included methods of managing and harvesting hardwood stands, control of undesirable species, and the relationship of soil type to timber management. Commission foresters are encouraged to attend meetings of the Society of American Foresters, and to keep abreast of the latest research and technical developments so they can render the highest type of technical forestry service to landowners.

The in-service training program of the Division of State Parks included a school for all State Park Superintendents who attended a 3-day training meeting during the year, at which various phases of state park administration, operation, maintenance and public relations were covered.



## NEWS RELEASES AND ARTICLES

Newspapers and magazines accepted and used material prepared by personnel of the Commission more readily than ever before. This is largely due to the constant effort to furnish better quality photographs and written material for the editors. The material is also more acceptable to the readers because it is more readable and more interesting. This improvement is due primarily to Information and Education training.

During the year Commission personnel prepared 820 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during fire situations, news items would be given orally to individual papers and to the wire services.

In addition to news releases, several feature articles on various phases of state parks and forestry were prepared. Pictures or prepared mats illustrating the story were usually sent with the feature.

Forestry Commission personnel in every county of the state prepared news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors. The excellent press coverage has helped place forestry and state park news before the people more prominently than ever before.

## BOYS' FORESTRY CAMP

The sixth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 25-30. Seventy-one young men representing every county in the state attended the week-long camp. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject "Why I Would Like To Attend Boys' Forestry Camp." On invitation of the Commission, 20 FFA boys were selected by the Vocational Agriculture Section of the Division of Vocational Education, State Department of Education, on the basis of forestry activity in FFA chapters in the state. In the same manner 20 more were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program—of study and fun characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques,





Group from Boy's Forestry Camp take part in a demonstration of a tree planting machine.

forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by State Parks.

### **SIGN AND WOODWORKING SHOP**

The Commission's sign and woodworking shop continued to produce routed letter signs, picnic chairs and tables, fair exhibits, and other necessary cabinet and carpentry work. This work benefitted forestry greatly during the year. The distinctive routed letter signs identified the various Forestry and State Park installations with the Commission of Forestry. The Commission's fair exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

### **SOUTH CAROLINA TREE FARMS SYSTEM**

The South Carolina Tree Farms System is part of a program initiated by Woodusing industries to recognize the many deserving landowners who practice good forestry. To become a Tree



Farmer a landowner must prevent woods fires and take all reasonable precautions against them. In addition, he must apply sound cutting practices to existing timber and must plant areas that will not reseed naturally. After a Tree Farmer is certified, his property is marked with a Tree Farm sign. His neighbors and people passing by may see good forestry practices and come to understand forest values. Tree Farms are also effective places to hold demonstrations on all phases of forestry.

The Tree Farm movement is sponsored in South Carolina by the State Commission of Forestry and the Clemson College Extension Service, with financial assistance from the Southern Pine Association, and is encouraged nationally by American Forest Products Industries, Inc.

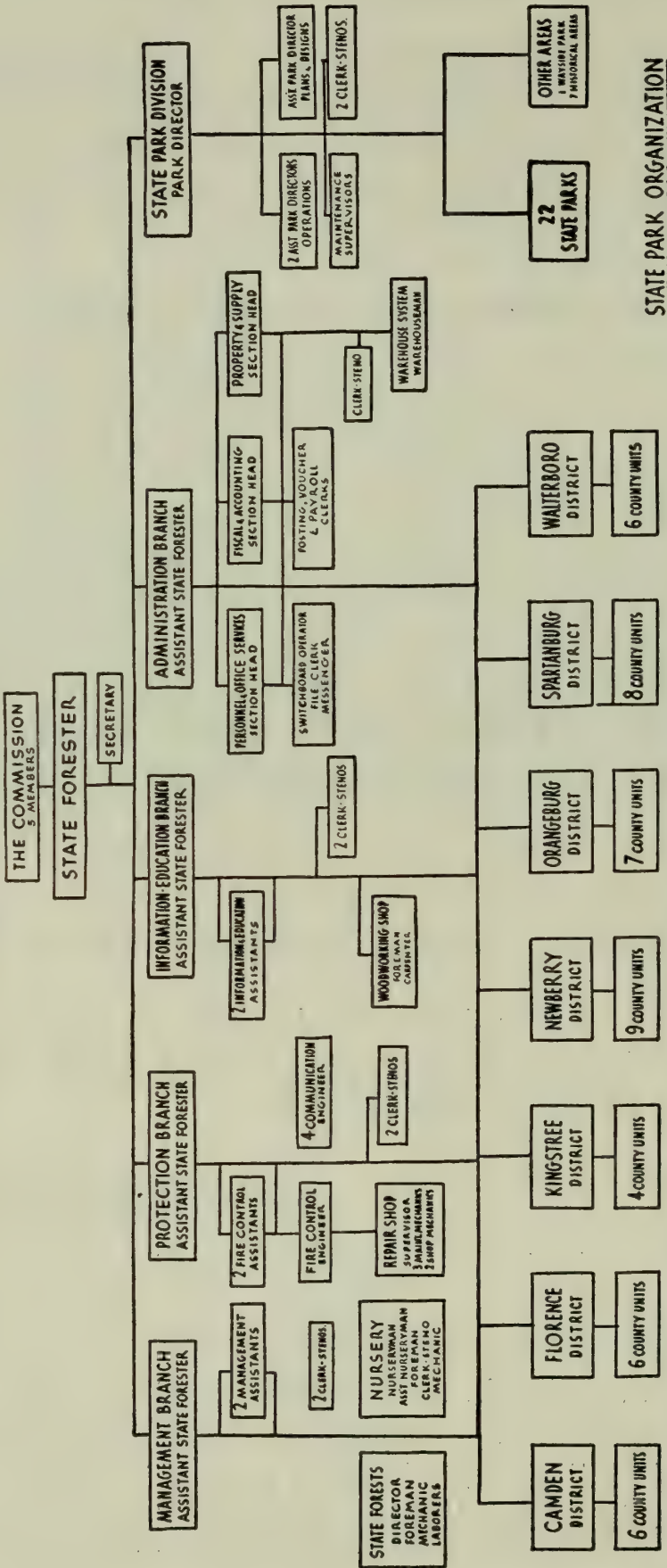
Before a landowner can be certified as a Tree Farmer, his application must pass the County Tree Farm Committee which is made up of the District Forester, County Agent, and a member appointed by the County Forestry Board. After clearing this committee, the application goes to the State Committee which takes final action. This committee is made up of prominent citizens of the state interested in the advancement of forestry. They are: James H. Graham, Charleston; C. P. Key, Lodge; Oswald Lightsey, Miley; Director D. W. Watkins, Clemson; S. B. Huff, Piedmont; and State Forester C. H. Flory, Columbia. Assistant State Forester John C. Witherspoon is Secretary of the State Committee.

There are now 107 Tree Farms in the state comprising 1,139,071 acres. The following landowners qualified under the South Carolina Tree Farms System this year:

NAME	COUNTY	ACREAGE
International Paper Company.....	Aiken, Chester, Fairfield, Kershaw, Laurens, Newberry, Richland and Union Counties	60,406
W. H. Manning, Jr.....	Barnwell .....	549
Tuomey Hospital.....	Sumter .....	1,900
Mrs. E. R. Mobley.....	Edgefield .....	1,000
George Patrick.....	Orangeburg .....	700
Anthony Fogle.....	Orangeburg .....	140
Union Memorial Presbyterian Church.....	Fairfield .....	425
Thomas W. Timms.....	Fairfield .....	400
Cragmoor Farms.....	Spartanburg .....	1,100
J. P. Brunson, Sr.....	Darlington .....	468
Eastover School.....	Richland .....	5
William H. Wicker.....	Newberry .....	586
P. T. Harris.....	Newberry .....	200
William E. Senn.....	Newberry .....	135
G. B. Reagin Estate.....	Newberry .....	250
Dr. J. E. Grant.....	Newberry .....	197
E. Guy Foster.....	York .....	400
Charlton DuRant.....	Clarendon .....	229
E. E. Dargan.....	Horry .....	160
W. E. Watts.....	Horry .....	37
J. Porter Gaston.....	Chester .....	155
Total.....		69,442

# SOUTH CAROLINA STATE COMMISSION OF FORESTRY

## ORGANIZATION CHART



### DISTRICT OFFICE ORGANIZATION

- DISTRICT FORESTER
- 2 ASSISTANT FORESTERS
- DISTRICT RANGER
- CLERK-STENOGRAPHER

### COUNTY UNIT ORGANIZATION

- COUNTY FORESTRY BOARD (MEMBERS 5)
- RANGER
- DISPATCHER
- WARDEN
- TRACTOR OPERATORS
- FLEXIBLE CREWS
- TOWER MEN
- VOLUNTEER CREWS

### STATE PARK ORGANIZATION

- REGULAR
- SUPERINTENDENT
- RANGER
- FOREMAN
- LABORERS
- SEASONAL
- LIFE GUARDS
- BATH HOUSE OPERATORS
- CONCESSIONAIRE



## ADMINISTRATION

The Commission's Administrative Branch is responsible for coordinating the activities of both central and field offices on fiscal and accounting, property and supply, and personnel and office services for both Divisions of the Commission—State Parks and Forestry.

### PERSONNEL ACCIDENT AND INJURY

During the year, 53 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents; preventative measures were initiated when such instances were noted.

### AUTOMOTIVE ACCIDENTS

Emphasis was placed on the careful operation of the 150 Commission-owned motor vehicles through specific training and affiliation with the National Safety Council.

Of the twelve automotive accidents which occurred during the fiscal year, all of them were minor in nature, and five not the fault of our operators. Considering the size of the automotive fleet and the total number of miles traveled under all conditions, this represents an outstanding record. A review of the employees driving records indicates that 79 of the 150 have operated Commission vehicles for a period of 1 to 5 years without an accident; 47 for 6 to 10 years; 19 for 11 to 15 years; and 5 for more than 16 years.

### COMMISSION PURCHASING

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and fiscal procedure. A total of 1,651 requisitions were received and 1,659 purchase orders issued during the year.

Visual inventories were made during the year of all equipment in use by both the Divisions of Forestry and State Parks. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$791,645. In addition, the Commission has real property and improvements now estimated to be worth \$66,107,196.

### PERSONNEL

Personnel employed by the Commission continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Twenty percent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.



## APPENDIX

## FINANCIAL STATEMENT

## SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1952—June 30, 1953

## RECEIPTS

## Division of Forestry:

Balance from 1951-52—Federal Fund .....	\$ 16.81	
Balance from 1951-52—Radio Com. Fund .....	738.36	
State Appropriation—Operations .....	907,044.50	
Federal Funds—Protection CM Law Sec. 2 .....	278,834.00	
Federal Funds—Reforestation CM Sec. 4 and N.D. ....	9,627.00	
Federal Funds—Cooperative Forest Man- agement .....	15,818.00	
Nursery .....	43,987.25	
State Forests .....	42,179.85	
Marking and Tallying Timber .....	7,387.08	
Counties and Timber Firms .....	12,251.41	
Miscellaneous Receipts .....	77.04	
Radio Communication Project .....	20,313.44	
		<hr/>
Total Receipts—Forestry .....		\$1,338,274.74
Less Receipts Deposited to Cr. State Revenue Account .....		93,631.22
		<hr/>
Total Receipts Available for Expenditures .....		\$1,244,643.52
Total Expenditures .....		1,229,784.49
		<hr/>
Balance—Division of Forestry .....		\$ 14,859.03*

## Division of State Parks:

Balance From 1951-52—Hunting Island De- posits .....	\$ 2,296.81
Balance from 1951-52—Myrtle Beach Fish- ing Pier .....	604.83
Appropriation 1951-52—Ear Marked for Colored Park .....	50,000.00
Cheraw Park—Fire Damaged Timber .....	18,724.70
State Appropriation—Operating .....	308,602.00
State Appropriation—Historical Areas .....	7,360.00
Forests and Parks Fund—Hunting Island Deposits .....	2,185.00
Myrtle Beach Fishing Pier .....	32,128.44

Cabin Rentals .....	21,967.74	
Concession Stands .....	3,790.60	
Bathhouse Receipts .....	35,927.67	
Boat Rentals .....	3,902.15	
Group Camps .....	11,009.90	
Picnic Shelters and Recreation Bldgs. ....	1,565.58	
Miscellaneous Receipts .....	733.95	
	<hr/>	
Total Receipts—Parks .....		\$ 500,799.37
Less Receipts Deposited to Cr. Revenue Account .....		78,897.59
		<hr/>
Total Receipts Available for Expenditures		\$ 421,901.78
Total Expenditures .....		345,848.62
		<hr/>
Balance—Division of State Parks .....		\$ 76,053.16†

## EXPENDITURES

Administrative and Technical .....	\$325,023.94	
State Forest Nursery .....	63,918.02	
State Forest Projects .....	39,300.39	
Fire Protection .....	801,542.14	
	<hr/>	
Total—Division of Forestry .....		\$1,229,784.49
Total—Division of State Parks .....		345,848.62
		<hr/>
Grand Total—Expenditures .....		\$1,575,633.11

## RECAPITULATION

## Funds Available:

Division of Forestry .....	\$1,244,643.52	
Division of State Parks .....	421,901.78	
	<hr/>	
		\$1,666,545.30

## Expenditures:

Division of Forestry .....	\$1,229,784.49	
Division of State Parks .....	345,848.62	
	<hr/>	
		—1,575,633.11
		<hr/>
Balance .....		\$ 90,912.19*†



*Forestry:	Federal Fund .....	\$ 94.49
	Radio Communication .....	14,764.54
†Parks:	Appro.—Ear-marked for Colored	
	Park .....	49,950.00
	Appro.—Ear-marked for Andrew	
	Jackson Park .....	14,397.75
	Appro.—Reverting to State Rev.	11.86
	Hunting Island Deposits .....	3,386.49
	M. B. Fishing Pier .....	8,226.14
	Cheraw Park — Fire Damaged	
	Timber .....	80.92
		<hr/>
		\$90,912.19

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1952-53

UNIT	Organized Personnel							Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Members, Retainer Crews	Members, Flexible Crews	Total	Volunteer, FFSS Crews	Other Volunteers	
Abbeville .....	1	2	..	1	..	3	7	192	265	464
Aiken .....	1	4	2	5	..	10	22	8	700	730
Allendale .....	1	2	1	3	..	4	11	18	167	196
Anderson .....	1	2	..	3	..	4	10	90	512	612
Bamberg .....	1	2	1	2	..	4	10	70	301	381
Barnwell .....	1	2	1	2	..	..	6	34	667	707
Beaufort .....	1	3	1	3	..	1	9	9	210	228
Berkeley .....	1	4	1	4	..	..	10	21	811	842
Calhoun .....	1	2	1	2	..	2	8	10	82	100
Charleston .....	1	4	1	3	..	4	13	10	293	316
Cherokee .....	1	1	..	1	..	6	9	50	449	508
Chester .....	1	3	..	1	..	3	8	27	340	375
Chesterfield .....	1	3	1	4	..	2	11	45	212	268
Clarendon .....	1	3	1	3	..	6	14	16	254	284
Colleton .....	1	4	2	5	..	4	16	34	802	852
Darlington .....	1	2	..	3	..	7	13	18	547	578
Dillon .....	1	2	1	2	..	4	10	14	284	308
Dorchester .....	1	3	1	3	..	3	11	6	122	139
Edgefield .....	1	2	..	1	..	2	6	156	210	372
Fairfield .....	1	4	..	3	16	..	24	42	452	518
Florence .....	1	4	1	4	..	14	24	23	425	472
Georgetown .....	1	4	2	4	3	..	14	13	299	326
Greenville .....	1	3	..	4	..	4	12	96	808	916
Greenwood .....	1	2	..	2	..	2	7	185	466	658
Hampton .....	1	3	1	3	..	..	8	25	217	250
Horry .....	1	5	2	4	..	5	17	15	518	550
Jasper .....	1	3	1	2	..	1	8	10	523	541
Kershaw .....	1	3	2	6	..	4	16	45	210	271
Lancaster .....	1	3	1	2	..	..	7	21	254	282
Laurens .....	1	3	..	2	..	..	6	96	299	401
Lee .....	1	2	1	3	..	3	10	30	203	243
Lexington .....	1	3	1	5	..	3	13	12	509	534
Marion .....	1	3	1	3	..	6	14	22	287	323
Marlboro .....	1	3	1	3	..	5	13	30	293	336
McCormick .....	1	1	..	..	..	2	4	55	192	251
Newberry .....	1	2	..	2	..	2	7	75	496	578
Oconee .....	1	2	..	3	..	7	13	58	393	464
Orangeburg .....	1	5	2	5	..	5	18	40	614	672
Pickens .....	1	3	..	4	..	10	18	29	242	289
Richland .....	1	5	1	4	..	3	14	42	437	493
Saluda .....	1	2	..	1	..	..	4	60	313	377
Spartanburg .....	1	3	..	4	..	6	14	12	331	357
Sumter .....	1	3	1	3	..	3	11	25	340	376
Union .....	1	2	..	1	..	7	11	79	233	323
Williamsburg .....	1	5	1	4	..	1	12	153	401	566
York .....	1	2	..	4	..	14	21	133	427	581
Totals.....	46	133	34	136	19	176	544	2,254	17,410	20,208



TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1952—JUNE 30, 1953

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	228	4.6	2,548.6	11.2
August .....	50	1.0	330.7	6.6
September .....	35	0.7	82.7	2.4
October .....	295	6.0	4,017.2	13.6
November .....	604	12.3	12,882.4	21.3
December .....	328	6.7	5,525.0	16.8
January .....	674	13.7	11,926.7	17.7
February .....	539	10.9	8,211.1	15.2
March .....	759	15.4	12,716.7	16.8
April .....	938	19.0	15,310.9	16.3
May .....	233	4.7	1,449.1	6.2
June .....	245	5.0	3,192.7	13.0
Totals.....	4,928	100.0	78,193.8	15.9

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1952-53

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville .....	..	..	2	7.6	4	14.9	15	69.2	10	75.5	9	49.4	1	4.5	5	87.7	46	308.8
Aiken .....	10	37.5	1	24.0	6	462.9	51	684.3	32	426.8	47	945.9	4	44.9	67	421.6	218	3047.9
Allendale .....	..	..	1	15.0	2	26.0	41	356.5	42	408.0	8	264.3	..	..	7	44.5	101	1114.3
Anderson .....	..	5.5	..	..	..	..	35	227.0	31	326.1	12	128.6	..	..	7	35.8	87	723.0
Bamberg .....	..	..	1	5.0	1	4.5	20	154.5	45	537.4	27	185.1	6	233.2	2	14.0	102	1113.7
Barnwell .....	1	2.0	14	4.1	14	80.4	94	588.1	28	272.6	4	11.3	..	..	6	12.7	149	971.2
Beaufort .....	1	15.0	..	..	2	5.2	8	18.5	12	284.0	46	1769.6	1	0.5	11	51.7	81	2144.5
Berkeley .....	..	..	..	..	..	..	16	94.3	20	68.7	280	3426.8	3	91.0	33	267.0	354	3951.3
Calhoun .....	1	1.2	..	..	..	7.5	24	90.1	..	..	6	33.9	..	..	1	20.0	35	152.7
Charleston .....	1	20.0	..	..	1	5.4	13	91.7	19	176.1	84	1379.8	3	30.0	1	0.8	122	1703.8
Cherokee .....	..	..	..	..	..	..	25	271.4	2	47.0	3	4.5	..	..	2	32.0	33	355.4
Chester .....	3	90.0	3	20.0	3	41.2	6	22.5	5	25.4	3	187.3	3	19.0	10	218.0	35	623.4
Chesterfield .....	5	129.1	6	18.0	6	18.6	11	37.1	13	99.5	27	896.0	1	521.0	9	44.1	73	1763.4
Clarendon .....	..	..	3	..	3	55.0	22	242.9	20	291.5	108	2541.0	1	24.0	5	31.0	159	3185.4
Colleton .....	3	61.0	7	..	7	87.0	32	303.1	53	354.4	71	546.8	4	10.0	5	26.5	175	1388.8
Darlington .....	1	15.0	9	..	9	109.9	28	139.1	24	119.9	3	284.0	..	..	8	36.8	73	704.7
Dillon .....	..	..	2	7.9	2	10.0	24	177.2	10	1431.5	29	265.4	6	75.1	5	15.3	81	1982.4
Dorchester .....	..	..	..	..	..	..	13	451.6	17	459.4	20	571.1	1	35.0	5	76.0	56	1593.1
Edgefield .....	2	6.4	..	..	..	..	8	41.9	12	57.7	9	151.9	1	1.2	1	3.0	34	280.1
Fairfield .....	3	14.0	3	178.0	3	10.7	24	246.5	7	34.0	9	148.0	10	47.3	5	14.6	70	693.1
Florence .....	1	15.0	2	4.0	2	31.5	38	402.2	62	680.9	81	1224.9	3	29.1	2	44.0	191	2431.6
Georgetown .....	2	5.0	..	0.1	..	..	7	36.1	4	162.2	50	277.0	4	84.3	5	72.5	73	637.2
Greenville .....	1	108.0	11	..	11	17.7	111	765.0	50	377.9	14	353.3	..	..	29	73.2	216	1695.1
Greenwood .....	1	30.6	2	..	2	15.0	16	264.9	11	62.6	1	8.4	3	59.0	7	293.3	44	753.7
Hampton .....	1	1.2	..	..	..	..	18	53.8	11	32.4	30	150.9	..	..	16	134.1	76	372.4
Horry .....	4	33.5	1	..	1	7.9	79	1425.7	36	906.5	101	4530.0	3	62.3	16	1313.8	240	8279.7
Jasper .....	6	152.8	..	258.0	..	..	19	445.8	22	1724.0	95	2458.7	2	85.0	16	1312.4	163	6436.7
Kershaw .....	2	39.0	3	..	3	84.0	13	232.3	14	379.2	9	89.2	2	0.7	24	486.4	67	1310.8
Lancaster .....	1	12.0	..	..	..	..	26	90.6	15	35.8	13	271.9	2	3.0	5	10.4	61	423.7
Laurens .....	..	..	1	1.0	1	2.4	13	1020.8	11	59.8	2	189.0	1	5.0	3	53.0	32	1331.0
Lee .....	1	35.0	4	..	4	124.0	11	150.9	7	60.1	7	146.0	..	..	15	205.7	45	721.7
Lexington .....	9	40.9	3	12.5	3	26.7	35	187.0	26	160.6	6	9.6	4	7.0	13	62.9	105	507.2
Marion .....	1	0.3	..	..	3	1.9	16	75.2	12	53.8	24	2915.1	1	2.0	4	7.2	61	3055.5



Marlboro .....	1	7.7	..	.....	1	0.5	15	139.6	28	1817.1	78	1360.0	1	195.0	8	55.8	122	3575.7
McCormick .....	2	5.2	7.	300.4	..	.....	17	125.3	3	26.8	1	3.0	1	7.0	1	1.0	32	468.7
Newberry .....	4	10.5	1	1.0	3	32.0	19	134.6	13	139.8	..	.....	4	2.8	11	60.0	55	380.7
Oconee .....	..	.....	2	2.0	2	8.7	19	129.7	20	201.8	9	23.9	5	32.9	18	158.1	75	557.1
Orangeburg .....	..	.....	1	2.0	9	153.7	18	188.7	49	774.5	363	7099.8	4	169.8	4	18.2	448	8406.7
Pickens .....	..	.....	1	10.0	1	0.1	14	55.8	18	85.4	6	1.1	2	3.0	19	50.3	61	205.7
Richland .....	4	12.1	6	90.0	4	12.6	54	446.0	35	214.1	50	825.8	1	1.5	10	78.9	164	1681.0
Saluda .....	1	3.0	..	.....	1	0.5	12	173.0	11	140.8	7	99.7	..	.....	12	52.1	44	469.1
Spartanburg .....	..	.....	1	3.0	8	69.1	31	310.7	16	213.1	9	99.7	..	.....	14	174.9	79	870.5
Sumter .....	3	132.1	1	1.0	..	.....	24	121.0	14	277.1	37	394.8	..	.....	1	1.0	80	927.0
Union .....	..	.....	1	1.5	1	1.0	16	147.5	8	492.5	5	26.5	3	12.0	6	33.0	40	714.0
Williamsburg .....	1	0.2	4	27.9	3	44.0	23	569.3	29	420.3	81	2076.3	8	79.7	2	0.9	151	3218.6
York .....	..	.....	1	1.5	1	5.6	36	263.1	37	363.9	18	181.9	..	.....	16	125.7	109	941.7
Totals.....	79	1040.8	64	1033.4	139	1582.1	1210	12262.1	964	15358.5	1902	38607.2	98	1977.8	472	6331.9	4928	78193.8

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1952-53

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	Total No.
Abbeville .....	6	34	6	....	....	46
Aiken .....	21	150	41	6	....	218
Allendale .....	....	73	27	1	....	101
Anderson .....	1	69	16	1	....	87
Bamberg .....	5	69	27	1	....	102
Barnwell .....	6	127	16	....	....	149
Beaufort .....	17	38	21	5	....	81
Berkeley .....	39	220	89	6	....	354
Calhoun .....	4	28	3	....	....	35
Charleston .....	5	73	44	....	....	122
Cherokee .....	1	25	6	1	....	33
Chester .....	1	19	14	1	....	35
Chesterfield .....	8	46	15	3	1	73
Clarendon .....	6	96	53	4	....	159
Colleton .....	13	131	31	....	....	175
Darlington .....	11	50	12	....	....	73
Dillon .....	13	54	13	....	1	81
Dorchester .....	2	29	22	3	....	56
Edgefield .....	1	25	8	....	....	34
Fairfield .....	....	53	16	1	....	70
Florence .....	7	109	75	....	....	191
Georgetown .....	7	52	13	1	....	73
Greenville .....	39	148	25	4	....	216
Greenwood .....	....	32	11	1	....	44
Hampton .....	11	58	7	....	....	76
Horry .....	24	102	95	19	....	240
Jasper .....	14	70	66	12	....	163
Kershaw .....	7	34	24	2	1	67
Lancaster .....	5	47	9	....	....	61
Laurens .....	....	21	9	1	1	32
Lee .....	3	22	20	....	....	45
Lexington .....	11	83	11	....	....	105
Marion .....	10	41	9	....	1	61
Marlboro .....	8	82	37	4	1	132
McCormick .....	....	24	7	1	....	32
Newberry .....	4	41	10	....	....	55
Oconee .....	7	59	9	....	....	75
Orangeburg .....	....	248	191	9	....	448
Pickens .....	13	43	5	....	....	61
Richland .....	9	116	38	1	....	164
Saluda .....	1	32	11	....	....	44
Spartanburg .....	5	56	18	....	....	79
Sumter .....	4	59	15	2	....	80
Union .....	....	31	8	1	....	40
Williamsburg .....	18	80	47	6	....	151
York .....	7	71	31	....	....	109
Totals.....	374	3170	1281	97	6	4928

Note: Class A—Under  $\frac{1}{4}$  acre; B— $\frac{1}{4}$  to 10 acres; C—11 to 100 acres; D—101 to 500 acres; E—over 500 acres.



UNIT	July 1952		Aug. 1952		Sept. 1952		Oct. 1952		Nov. 1952		Dec. 1952		Jan. 1953		Feb. 1953		March 1953		April 1953		May 1953		June 1953	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	6	15.7	10	55.8	4	8.7	26	182.5	9	11.8	1	13.2	6	34.4	3	14.5	7	118.0	11	79.0	2	9.3	1	4.2
Aiken	19	96.5	6	27.3	..	..	11	16.0	12	424.3	13	80.0	14	83.6	24	174.0	40	991.2	32	849.2	10	38.2	14	63.9
Allendale	..	..	..	..	..	..	..	..	27	327.5	..	249.5	21	158.5	20	274.5	11	55.0	18	253.5	3	7.0	..	..
Anderson	9	51.0	..	..	..	..	11	57.8	9	73.0	..	..	33	361.2	10	164.5	16	149.0	23	111.6	1	1.5	1	1.0
Bamberg	4	233.2	2	53.0	1	5.0	3	5.5	10	24.3	..	34.5	30	187.8	30	317.1	23	156.0	13	94.0	2	9.5	1	3.0
Barnwell	..	..	1	1.0	..	..	8	52.4	14	32.7	17	148.3	12	204.3	5	432.3	11	162.1	14	47.2	6	8.2	6	14.4
Beaufort	1	2.5	..	..	1	0.1	5	24.0	13	93.3	9	163.3	74	1314.3	47	371.3	52	606.4	7	39.9	3	11.0	4	25.6
Berkeley	4	20.3	..	..	1	0.1	6	32.1	24	305.8	26	144.4	5	30.7	2	13.9	6	17.6	8	874.0	19	112.3	16	170.3
Calhoun	1	1.2	..	..	..	..	..	..	8	41.7	2	20.1	25	281.3	9	88.5	19	216.9	25	478.6	2	3.4	1	0.2
Charleston	2	12.2	1	1.0	..	..	..	..	11	342.7	16	172.1	1	0.5	8	67.5	..	..	8	227.1	6	25.2	3	23.0
Cherokee	1	0.5	..	..	..	..	..	..	13	56.7	..	..	1	1.0	2	18.0	..	..	6	87.0	..	..	..	..
Chester	3	62.0	..	..	1	8.0	4	55.0	10	244.5	..	2.9	3	264.0	7	72.5	14	193.6	21	998.0	3	15.0	7	33.5
Chesterfield	2	118.0	3	11.1	..	..	5	25.7	5	31.0	3	1.0	30	1232.2	24	610.5	32	274.7	40	511.6	6	25.3	4	32.0
Clarendon	2	39.0	..	..	..	..	2	53.0	9	110.3	10	296.8	23	162.2	22	198.7	49	427.6	20	159.0	13	66.0	5	20.0
Colleton	8	233.8	..	..	4	3.0	5	14.1	13	26.9	13	77.5	7	47.8	7	80.4	10	46.7	12	365.9	5	37.0	12	15.8
Darlington	2	15.1	1	0.2	1	0.3	5	5.0	9	83.9	2	6.6	9	45.8	12	70.7	5	78.2	18	1502.6	8	13.7	5	63.3
Dillon	2	12.2	..	..	4	4.7	6	34.9	7	105.2	5	51.1	14	415.6	7	131.5	8	235.0	9	454.0	4	58.0	1	12.0
Dorchester	..	..	..	..	..	..	..	..	4	19.0	9	268.0	1	13.3	2	21.9	8	60.9	7	116.2	..	..	..	..
Edgefield	6	47.1	1	5.4	1	1.4	1	0.5	5	12.8	1	0.6	2	0.3	4	11.0	5	30.0	14	198.7	..	..	..	..
Fairfield	6	35.0	1	15.0	..	..	8	68.0	12	256.6	3	13.7	26	386.7	27	188.9	31	455.0	53	921.4	9	46.4	12	55.6
Florence	2	21.1	..	..	..	..	3	11.6	10	152.6	17	177.3	6	21.4	6	49.7	5	25.0	24	307.8	5	38.5	10	27.0
Georgetown	4	57.3	3	55.0	..	..	1	0.1	8	47.4	1	8.0	1	1.0	22	117.8	36	212.6	46	360.7	2	1.2	8	23.7
Greenville	13	143.9	..	..	..	..	37	91.4	43	725.8	5	14.3	1	..	2	2.0	8	82.0	11	46.0	3	67.8	2	4.4
Greenwood	5	111.8	..	..	..	..	5	12.2	7	426.5	..	..	12	84.0	9	73.2	10	95.8	6	25.7	5	21.7	1	1.2
Hampton	2	2.1	2	3.0	1	1.0	5	5.6	15	43.6	8	16.3	20	564.6	12	598.9	49	2753.6	66	1694.5	16	177.1	25	1292.2
Horry	12	330.9	5	0.5	1	1.9	8	102.2	12	594.3	14	169.0	20	1820.0	17	133.8	13	667.8	9	129.7	4	116.5	5	122.2
Jasper	5	38.2	5	54.4	..	..	4	51.1	20	753.4	33	2549.6	48	98.0	6	45.5	7	155.0	14	460.7	2	3.0	2	56.0
Kershaw	5	65.5	..	..	1	1.0	12	284.7	9	101.2	3	40.2	2	1.5	2	9.0	9	40.8	18	171.0	3	11.0	5	20.0
Lancaster	6	90.3	..	..	..	..	4	3.0	11	74.3	1	2.8	6	..	2	..	5	40.7	12	121.1	1	2.8	..	..
Laurens	3	3.9	..	..	..	..	5	172.5	6	990.0	..	..	..	..	..	..	12	123.2	4	38.1	2	12.5	..	..
Lee	2	36.0	..	..	..	..	13	68.2	12	369.7	2	35.0	5	52.0	3	55.0	15	134.0	11	61.7	5	41.0	5	41.5
Lexington	16	64.5	..	..	..	..	4	6.2	11	22.4	8	17.3	12	27.6	9	29.0	3	3.4	12	59.0	8	12.3	5	14.8
Marion	4	33.3	..	..	..	..	4	6.2	7	2782.6	8	95.1	6	33.6	4	15.2	34	522.7	23	497.5	5	30.4	1	0.6
Marlboro	1	7.7	..	..	..	..	3	1610.0	18	317.1	10	66.5	15	76.6	22	446.6	5	33.9	4	103.0	1	7.0	1	4.5
McCormick	3	2.0	..	..	..	..	4	48.7	9	246.2	2	9.0	1	1.0	2	21.6	3	2.8	6	36.0	3	12.9	6	4.6
Newberry	10	25.6	1	0.3	4	34.1	8	48.7	11	206.7	1	4.0	1	..	1	4.0	11	46.0	14	125.1	2	3.4	..	..
Oconee	7	14.2	2	5.0	2	1.4	14	261.8	17	76.8	7	6.3	..	..	5	17.1	11	1311.4	67	981.7	13	86.1	27	544.5
Orangeburg	6	53.1	1	27.0	..	..	4	63.9	32	505.6	26	313.0	122	2375.3	81	2375.3	69	1311.4	14	125.1	10	3.4	..	..
Pickens	2	4.5	..	..	1	1.0	6	14.2	17	58.2	2	2.0	..	..	2	1.3	18	115.5	26	438.7	10	45.8	8	7.4
Richland	12	100.4	..	..	4	6.0	12	58.8	23	457.5	14	77.8	17	160.8	22	168.1	10	39.2	5	43.6	2	12.8	1	11.0
Saluda	11	139.8	3	3.5	1	..	4	110.6	7	79.6	2	23.0	..	..	..	..	8	128.6	23	267.9	4	12.3	3	10.1
Spartanburg	3	4.6	..	..	..	..	11	97.5	23	327.5	..	..	..	..	2	22.0	10	193.6	15	263.0	4	32.5	5	29.7
Sumter	3	132.1	..	..	..	..	4	20.0	9	34.8	7	37.9	12	126.4	7	61.2	14	189.4	15	263.0	4	7.5	1	0.5
Union	7	49.5	1	12.0	..	..	3	17.0	10	527.0	1	2.0	1	0.5	..	578.3	14	334.2	26	348.6	9	74.7	7	203.4
Williamsburg	3	5.7	1	0.2	..	..	1	19.0	18	127.1	7	70.1	46	1457.3	19	578.3	14	334.2	26	348.6	9	74.7	7	203.4
York	3	25.3	..	..	..	..	10	142.6	18	215.5	4	44.9	3	25.8	8	41.7	18	118.6	26	224.7	11	92.9	8	9.7
Totals	228	2548.6	50	330.7	35	82.7	295	4017.2	604	12882.4	328	5525.0	674	11926.7	539	8211.1	759	12716.7	938	15310.9	233	1449.1	245	3192.7

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1952-53

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	79	1.6	1,040.8	13.2
Railroads .....	64	1.3	1,033.4	16.2
Campers .....	139	2.8	1,582.1	11.4
Smokers .....	1,210	24.6	12,262.1	10.1
Debris Buring .....	964	19.6	15,358.5	15.9
Incendiary .....	1,902	38.6	38,607.2	20.3
Lumbering .....	98	1.9	1,977.8	20.2
Miscellaneous .....	472	9.6	6,331.9	13.4
Totals.....	4,928	100.0	78,193.8	15.9

TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1948-49	1949-50	1950-51	1951-52	1952-53	Average for 5-Year Period
Lightning .....	0.4	0.2	0.6	1.5	1.6	0.8
Railroads .....	5.2	2.8	2.3	3.1	1.3	2.9
Campers .....	2.5	2.5	2.7	2.3	2.8	2.6
Smokers .....	27.3	19.9	25.4	22.9	24.6	23.6
Debris Burning .....	20.2	18.0	19.1	19.5	19.6	19.1
Incendiary .....	35.6	48.2	38.6	41.5	38.6	41.2
Lumbering .....	1.3	1.7	1.5	2.0	1.9	1.7
Miscellaneous .....	6.0	4.9	7.4	7.2	9.6	6.8
Unknown .....	1.5	1.8	2.4	....	....	1.3



TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1952-53

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	46	308.8	.18	6.7
Aiken .....	450,200	218	3,047.9	.68	14.0
Allendale .....	131,400	101	1,114.3	.85	11.0
Anderson .....	173,700	87	723.0	.42	8.3
Bamberg .....	126,000	102	1,133.7	.90	11.1
Barnwell .....	147,800	149	971.2	.66	6.5
Beaufort .....	188,400	81	2,144.5	1.14	26.5
Berkeley .....	398,974	354	3,951.3	.99	11.2
Calhoun .....	123,500	35	152.7	.12	4.4
Charleston .....	271,994	122	1,703.8	.63	14.0
Cherokee .....	127,800	33	355.4	.28	10.8
Chester .....	260,023	35	623.4	.24	17.8
Chesterfield .....	310,000	73	1,763.4	.57	24.2
Clarendon .....	228,500	159	3,185.4	1.39	20.0
Colleton .....	465,000	175	1,388.8	.30	7.9
Darlington .....	208,500	73	704.7	.34	9.7
Dillon .....	144,100	81	1,982.4	1.38	24.5
Dorchester .....	268,200	56	1,593.1	.59	28.4
Edgefield .....	172,641	34	280.1	.16	8.2
Fairfield .....	228,957	70	693.1	.20	9.9
Florence .....	293,900	191	2,431.6	.83	12.7
Georgetown .....	415,600	73	637.2	.15	8.7
Greenville .....	267,800	216	1,695.1	.63	7.8
Greenwood .....	198,913	44	753.7	.38	17.1
Hampton .....	239,500	76	372.4	.16	4.9
Horry .....	557,600	240	8,279.7	1.48	34.5
Jasper .....	280,000	163	6,436.7	2.30	39.5
Kershaw .....	336,500	67	1,310.8	.39	19.6
Lancaster .....	199,400	61	423.7	.21	6.9
Laurens .....	244,735	32	1,331.0	.54	41.6
Lee .....	110,600	45	721.7	.65	16.0
Lexington .....	291,500	105	507.2	.17	4.8
Marion .....	224,700	61	3,055.5	1.36	50.1
Marlboro .....	150,600	132	3,575.7	2.37	27.1
McCormick .....	144,840	32	468.7	.32	14.6
Newberry .....	205,003	55	380.7	.19	6.9
Oconee .....	259,252	75	557.1	.21	7.4
Orangeburg .....	318,800	448	8,406.7	2.64	18.8
Pickens .....	190,100	61	205.7	.11	3.4
Richland .....	289,500	164	1,681.0	.58	10.3
Saluda .....	149,956	44	469.1	.31	10.7
Spartanburg .....	208,300	79	870.5	.42	11.0
Sumter .....	205,400	80	927.0	.45	11.6
Union .....	157,894	40	714.0	.45	17.9
Williamsburg .....	429,800	151	3,218.6	.75	21.3
York .....	226,300	109	941.7	.42	8.6
Totals.....	11,300,008	4,928	78,193.8	.69	15.9

TABLE 9—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1948-49 .....	11,542,170	5166	91,668.2	.78	17.7
1949-50 .....	11,789,643	8424	240,504.3	2.13	28.5
1950-51 .....	11,300,008	6643	147,840.3	1.31	22.3
1951-52 .....	11,300,008	4982	108,450.1	.96	21.8
1952-53 .....	11,300,008	4928	78,193.8	.69	15.9

TABLE 10—SEEDLING DISTRIBUTION BY LAND CLASSIFICATION—1952-1953

LAND OWNERSHIP	Loblolly	Slash	Longleaf	Arizona Cypress	Red Cedar	Totals
Farms .....	2,627,100	3,766,150	229,550	21,600	77,300	6,721,700
Association and Clubs.....	77,000	234,000	8,000	.....	.....	319,000
Schools .....	18,500	33,000	6,000	1,000	3,200	61,700
State Forests .....	25,000	210,000	40,000	.....	5,000	280,000
Other State Lands.....	50,000	222,100	10,000	.....	.....	282,100
Other Public Lands.....	4,000	55,500	5,500	1,000	1,000	67,000
Other Small Owners.....	572,500	2,374,600	77,500	2,950	18,150	3,045,700
Forest Industries .....	4,672,000	4,241,500	52,000	1,000	.....	8,966,500
Other Industries .....	829,000	452,000	53,000	.....	.....	1,334,000
Federal Lands .....	800,000	15,000	135,000	.....	.....	950,000
Totals.....	9,675,100	11,603,850	616,550	27,550	104,650	22,027,700
Out-of-State .....	50	50	5,000	.....	50	5,150
*Experimental Plantings by Santee Research Center (USFS) .....	.....	.....	.....	.....	.....	3,000
GRAND TOTALS.....	9,675,150	11,603,900	621,550	27,550	104,700	22,035,850

\*1,000 Cow Oak  
 1,000 Shumard Oak  
 1,000 Cherry Bark Oak



**TABLE 11—1952-1953—SEEDLING DISTRIBUTION**  
**Counties—Species—Amounts**

COUNTY	Loblolly	Slash	Longleaf	Arizona Cypress	Red Cedar	Totals
Abbeville .....	773,454	144,500	55,000	500	.....	973,454
Aiken .....	157,000	1,312,500	54,500	.....	5,000	1,529,000
Allendale .....	222,000	882,000	.....	.....	.....	1,104,000
Anderson .....	671,000	.....	3,000	.....	6,500	680,500
Bamberg .....	2,000	137,000	6,000	.....	1,000	146,000
Barnwell .....	35,000	375,000	4,000	.....	.....	414,000
Beaufort .....	5,000	32,000	3,000	.....	3,000	43,000
Berkeley .....	1,043,000	465,400	10,000	.....	1,000	1,522,400
Calhoun .....	.....	247,500	15,500	1,500	1,000	265,500
Charleston .....	650	40,350	10,000	.....	2,000	53,000
Cherokee .....	91,000	.....	2,000	.....	1,000	94,000
Chester .....	538,706	49,000	18,000	.....	3,000	608,706
Chesterfield .....	33,000	429,600	44,000	.....	1,000	507,600
Clarendon .....	8,500	194,500	11,000	6,500	.....	220,500
Colleton .....	110,000	645,200	17,500	3,500	2,200	778,400
Darlington .....	57,000	107,000	12,500	.....	.....	176,500
Dillon .....	4,000	39,000	10,000	.....	.....	53,000
Dorchester .....	212,000	133,800	31,000	500	.....	377,300
Edgefield .....	795,583	199,000	500	.....	1,000	996,083
Fairfield .....	152,672	38,000	.....	.....	.....	190,672
Florence .....	18,000	24,000	11,500	1,450	250	55,200
Georgetown .....	.....	318,000	.....	.....	.....	318,000
Greenville .....	68,500	3,500	.....	1,500	5,000	78,500
Greenwood .....	429,000	121,000	20,500	500	2,000	573,000
Hampton .....	4,500	398,500	.....	.....	3,000	406,000
Horry .....	131,000	87,500	15,000	.....	.....	233,500
Jasper .....	5,000	1,124,000	.....	.....	.....	1,129,000
Kershaw .....	268,500	2,341,000	9,500	500	3,000	2,622,500
Lancaster .....	533,000	43,000	13,000	.....	4,000	593,000
Laurens .....	812,826	25,368	2,500	.....	1,500	842,194
Lee .....	6,000	35,100	6,000	.....	.....	47,100
Lexington .....	95,500	426,500	47,500	1,000	8,000	578,500
Marion .....	13,000	40,000	8,000	2,000	.....	63,000
Marlboro .....	8,000	52,000	5,000	.....	3,000	68,000
McCormick .....	437,400	93,500	12,100	.....	200	543,200
Newberry .....	392,065	68,110	1,600	1,100	.....	462,875
Oconee .....	192,000	8,000	.....	500	8,000	208,500
Orangeburg .....	30,000	298,100	31,700	1,000	7,700	368,500
Pickens .....	156,500	.....	.....	.....	2,700	159,200
Richland .....	35,000	201,700	54,300	.....	6,500	297,500
Saluda .....	211,450	6,000	4,650	.....	1,000	223,100
Spartanburg .....	241,000	1,500	9,500	2,500	4,200	258,700
Sumter .....	39,000	258,500	18,000	2,000	8,500	326,000
Union .....	415,294	40,622	20,200	.....	4,400	480,516
Williamsburg .....	22,000	112,000	.....	.....	1,500	135,500
York .....	199,000	5,000	18,500	1,000	2,500	226,000
State Totals.....	9,675,100	11,603,850	616,550	27,550	104,650	22,030,700
Out-of-State .....	50	50	5,000	.....	50	5,150
GRAND TOTALS.....	9,675,150	11,603,900	621,550	27,550	104,700	22,035,850

TABLE 12—S. C. STATE COMMISSION OF FORESTRY  
DIVISION OF STATE PARKS

Summary of State Park Use, July 1, 1952–June 30, 1953

PARKS	Negro Area	No. Cabin Days Occupied	No. Cabin Occupants	No. Fishermen	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathroom Users	No. Out-of-State Cars	Total No. of Cars	No. Visitors Under 18	Total No. of Visitors
Aiken .....	...	...	...	1,188	2,924	26,468	13,527	4,630	1,163	15,511	20,064	49,158
Barnwell .....	...	...	...	954	1,663	62,178	23,128	5,127	3,083	38,886	45,103	114,104
Campbells Pond .....	(N)	...	...	1,749	142	1,436	2,772	560	567	2,347	4,029	7,472
Cheraw .....	...	433	2,975	19,985	9,103	74,928	80,858	19,866	18,799	47,805	123,425	216,400
Chester .....	...	...	...	2,393	699	28,560	.....	.....	1,970	17,741	22,606	70,702
Croft .....	...	...	...	.....	1,203	28,575	24,260	24,260	739	27,443	52,168	86,677
Edisto Beach .....	...	403	1,871	5,313	10,344	71,847	51,908	5,053	1,410	25,748	57,945	106,086
Givhans Ferry .....	...	140	818	.....	604	28,248	10,840	1,088	466	11,531	16,817	48,477
Greenwood .....	...	...	...	6,870	2,802	60,388	.....	.....	.....	36,230	31,925	139,095
Greenwood .....	(N)	...	...	.....	18	1,410	.....	.....	.....	275	525	1,600
Hunting Island .....	...	...	...	22,537	4,687	24,195	62,413	11,582	7,274	47,928	33,813	192,863
Hunting Island .....	(N)	...	...	251	257	2,638	4,726	926	1,480	7,732	5,683	32,440
Kings Mountain .....	...	...	...	1,734	2,051	19,004	13,301	8,809	19,339	30,527	64,192	144,803
Lee .....	...	...	...	1,133	904	18,616	16,958	4,906	344	14,409	27,992	57,170
Little Pee Dee .....	...	...	...	.....	435	9,748	.....	.....	295	7,105	7,778	18,280
Myrtle Beach .....	...	837	5,486	22,850	4,743	63,965	34,251	1,898	19,336	61,351	28,102	192,855
Oconee .....	...	1,457	8,771	.....	4,876	43,606	37,110	8,691	701	31,753	14,404	162,558
Paris Mountain .....	...	...	...	.....	14,000	98,101	20,567	19,352	3,318	73,718	96,656	296,202
Pleasant Ridge .....	(N)	...	...	.....	313	2,609	506	.....	156	1,121	2,329	5,349
Poinsett .....	...	178	1,101	992	4,940	71,316	32,360	18,576	2,464	31,916	58,406	150,304
Mill Creek .....	(N)	...	...	263	838	11,717	14,867	14,867	140	4,633	13,337	31,845
Rivers Bridge .....	...	...	...	126	836	17,179	11,807	11,690	619	15,733	19,866	47,567
Santee .....	...	...	...	770	4,985	60,008	38,712	7,210	2,202	26,234	58,178	119,985
Sesqui-Centennial .....	...	...	...	1,881	24,988	254,215	275,288	12,721	34,073	130,769	185,788	552,373
Table Rock .....	...	1,190	7,616	1,977	5,662	69,037	49,980	6,886	4,662	59,550	92,371	215,929
Colleton Wayside .....	...	...	...	.....	4,349	16,997	.....	.....	7,286	14,302	11,543	70,400
Totals.....	...	4,638	28,638	92,966	108,316	1,166,989	820,139	188,698	131,886	782,298	1,095,045	3,130,694

Pleasant Ridge—under construction—not formally open for park visitors.  
(N)—Negro area.

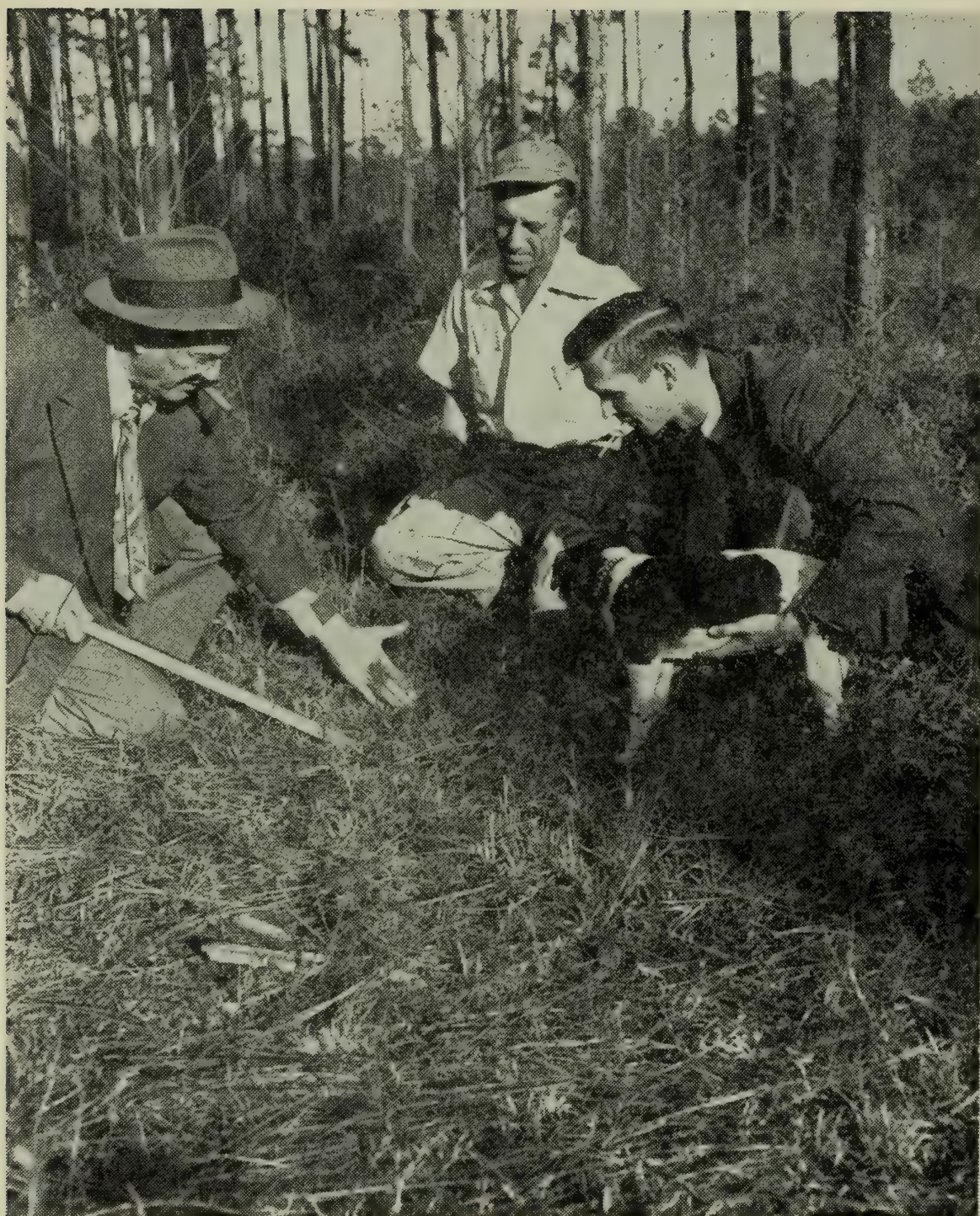












The major job of the State Commission of Forestry is to serve people. Here landowner Hubert Smoak of Dorchester County (left) is discussing forest fire protection and forest management problems with Forester M. T. Gaffney and Ranger C. H. Durr of the S. C. State Commission of Forestry.



STATE OF SOUTH CAROLINA

# REPORT

OF THE

# STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1953 TO JUNE 30, 1954



CHARLES H. FLORY, State Forester  
COLUMBIA, S. C.

Printed Under the Direction of the  
State Budget and Control Board

## TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL .....	5
PERSONNEL .....	6
SUMMARY .....	13
Recommendations .....	19
FOREST FIRE PROTECTION .....	21
Forest Area Protected .....	22
Forest Fire Protection Organization .....	22
Fire Protection Activities .....	23
Improvements, Tools and Equipment .....	29
Equipment .....	35
Forest Fire Summary .....	38
FOREST MANAGEMENT .....	43
Management Assistance .....	43
Reforestation .....	50
Cooperative Forest Management .....	54
State Forests .....	54
Cassatt State Forest .....	55
Harbison State Forest .....	55
Manchester State Forest .....	56
Sand Hills State Forest .....	59
STATE PARKS .....	65
Appropriations .....	65
State Park Areas .....	66
Vacation Facilities—Family Cabins .....	66
Group Camps .....	67
Historical Areas .....	67
Recommendations .....	68
The State Park System .....	71
INFORMATION AND EDUCATION .....	83
Forest Fire Prevention .....	83
Keep South Carolina Green .....	89
Cooperative Forest Fire Prevention Campaign .....	91
School Programs .....	95
Conservation Good Turn .....	97
Other Forestry Demonstrations .....	98
Georgetown Timber Festival .....	98
Conservation Week and Arbor Day .....	99
Motion Pictures .....	99
Vocational Agriculture School Forestry Program .....	100
Resource-Use Education .....	101
Talks and Exhibits .....	102
Radio and Television .....	105
Training .....	106
News Releases and Articles .....	107
Boys Forestry Camp .....	107
Sign and Woodworking Shop .....	108
South Carolina Tree Farms System .....	109
ADMINISTRATION .....	113
Personnel Accident and Injury .....	113
Automotive Accidents .....	113
Commission Purchasing .....	113
Personnel .....	114
Training .....	114
APPENDIX .....	115



*To Honorable James F. Byrnes, Governor, and to the General  
Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1953 to June 30, 1954.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
A. Leland Slade, Jr., *Chairman.*

## THE STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1954)

### *Members of the Commission*

A Leland Slade, Jr., Chairman, Aiken, S. C.  
 Dr. R. F. Poole, President, Clemson College, Clemson, S. C.  
 A. B. Taylor, Spartanburg, S. C.  
 Fulton B. Creech, Sumter, S. C.  
 Vendel M. Rogers, Mullins, S. C.

### *Secretary of the Commission*

Chas. H. Flory, State Forester

## DIVISION OF STATE PARKS

C. West Jacocks, State Park Director  
 T. D. Ravenel, Assistant State Park Director—Operations  
 E. R. Vreeland, Assistant State Park Director—Operations  
 Ralph W. Eckles, Head, Plans and Designs

### *State Park Superintendents*

Aiken State Park, E. S. Gunter, Jr., Supt., Windsor, S. C.  
 Andrew Jackson Historical Park (under construction)  
 Barnwell State Park, D. I. Ross, Supt., Blackville, S. C.  
 \*Cheraw State Park, George T. Holder, Supt., Cheraw, S. C.  
 Chester State Park, Clarence Doster, Supt., Chester, S. C.  
 Croft State Park, J. E. Thornton, Ranger, Spartanburg, S. C.  
 Edisto Beach State Park, Donald B. Cooler, Supt., Edisto  
 Island, S. C.  
 Givhans Ferry State Park, Wm. Wiggins, Jr., Supt., Ridge-  
 ville, S. C.  
 \*Greenwood State Park, M. R. LeRoy, Supt., Ninety Six, S. C.  
 \*Hunting Island State Park, Norman B. Cooler, Supt., Frog-  
 more, S. C.  
 Kings Mountain State Park, Raymond M. Sisk, Supt., Kings  
 Creek, S. C.  
 Lee State Park, Van W. Pressley, Supt., Bishopville, S. C.  
 Little Pee Dee State Park, LaFon Norton, Supt., Dillon, S. C.  
 Myrtle Beach State Park, Samuel H. Floyd, Supt., Myrtle  
 Beach, S. C.



Oconee State Park, James W. Ray, Supt., Walhalla, S. C.

Paris Mountain State Park, Ed. H. Miller, Supt., Greenville, S. C.

\*Pleasant Ridge State Park, LeRoy Smith, Ranger, Cleveland, S. C.

\*Poinsett State Park, F. Marion Dwight, Supt., Wedgefield, S. C.

Rivers Bridge State Park, E. B. Mobley, Supt., Ehrhardt, S. C.

Santee State Park, G. B. LaBoon, Supt., Santee, S. C.

Sesqui-Centennial State Park, Marshall Holder, Supt., Columbia, S. C.

Table Rock State Park, E. W. Cooler, Jr., Supt., Pickens, S. C.

Colleton Wayside Park, Willard Risher, Caretaker, Canadys, S. C.

---

\*Includes area for Negroes.

## **DIVISION OF FORESTRY**

### **Branch of Administration**

**E. B. Price, Assistant State Forester**

C. H. Nelson, Head, Fiscal and Accounting

Delford F. Furney, Head, Property and Supply

Virginia S. Holmes, Head, Personnel and Office Services  
Warehouse, Sumter, S. C.

J. P. Watson, Warehouseman

### **Branch of Information and Education**

**John C. Witherspoon, Assistant State Forester**

Walter T. Ahearn, Information and Education Assistant

Nelson L. Peach, Information and Education Assistant

Sign and Woodworking Shop, Sumter, S. C.

Olin M. Ballentine, Foreman

### **Branch of Forest Management**

**E. C. Pickens, Assistant State Forester**

A. A. Lehocky, Management Assistant

Howard R. Scott, Management Assistant

Sand Hills State Forest, Patrick, S. C.

Randolph B. Lee, Director

Manchester State Forest, Wedgefield, S. C.

C. W. Nuite, Director

Horace L. Tilghman Nursery, Wedgefield, S. C.

L. M. Staley, Nurseryman

### **Branch of Forest Fire Control**

**John R. Tiller, Assistant State Forester**

W. J. Barton, Fire Control Assistant

John M. Shirer, Fire Control Assistant

John R. McLees, Fire Control Engineer

J. M. Geddings, Communications Engineer-Telephone

R. M. Littlejohn, Communications Engineer-Radio

Equipment and Repair Shop, Sumter, S. C.

O. P. Woodward, Supervising Mechanic



### District Offices

Hugh M. Westbury, District Forester, Orangeburg, S. C.

Warren L. Brown, Forester, Orangeburg, S. C.

John E. Graham, Forester, Aiken, S. C.

Adrian Lee Pardue, District Ranger, Aiken, S. C.

(Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington and Orangeburg.)

Chauncey R. Nichols, District Forester, Camden, S. C.

Chester Kears, Forester, Camden, S. C.

Maurice D. Stucker, Forester, Camden, S. C.

W. O. Morgan, District Ranger, Camden, S. C.

(Camden District includes counties of: Chesterfield, Kershaw, Lancaster, Lee, Richland and Sumter)

Alvin E. Kunz, District Forester, Florence, S. C.

Wilbur H. Reames, Forester, Florence, S. C.

Robert N. McCombs, Forester, Florence, S. C.

John L. LeRoy, Forester, Conway, S. C.

C. Ray Anderson, District Ranger, Florence, S. C.

(Florence District includes counties of: Darlington, Dillon, Florence, Horry, Marion and Marlboro)

William M. Lindsey, District Forester, Kingstree, S. C.

Melvin F. Rodgers, Forester, Kingstree, S. C.

Marvin T. Gaffney, Forester, Kingstree, S. C.

John R. Grubbs, District Ranger, Kingstree, S. C.

(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown and Williamsburg)

E. L. Middleswart, District Forester, Newberry, S. C.

Harry Avedisian, Assistant Forester, Newberry, S. C.

F. W. Horn, Forester, Greenwood, S. C.

Clifton T. Carter, Timber Marker, Chester, S. C.

Melton Wall, District Ranger, Newberry, S. C.

(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

J. T. Hance, District Forester, Spartanburg, S. C.

Ralph W. Evans, Forester, Pickens, S. C.

Archie P. Butler, Jr., Forester, Spartanburg, S. C.

Claude F. Barden, Forester, Spartanburg, S. C.

Paul C. Bowie, District Ranger, Spartanburg, S. C.

(Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

Boris Hurlbutt, District Forester, Walterboro, S. C.

Archie C. Craft, Jr. Forester, Walterboro, S. C.

J. Harlan McLees, Forester, Walterboro, S. C.

Joseph W. Goldman, District Ranger, Walterboro, S. C.

(Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton and Jasper)

## PROTECTION UNITS

Abbeville Unit Ranger, Charlie Shaw, Lowndesville, S. C.

Aiken Unit Ranger, J. Ramie Yonce, Aiken, S. C.

Allendale Unit Ranger, W. W. Brunson, Allendale, S. C.

Anderson Unit Ranger, John E. Embler, Anderson, S. C.

Bamberg Unit Ranger, P. H. Cave, Olar, S. C.

Barnwell Unit Ranger, W. C. Rivers, Barnwell, S. C.

Beaufort Unit Ranger, R. W. Wisner, Beaufort, S. C.

Berkeley Unit Ranger, Harold McCoy, Bonneau, S. C.

Calhoun Unit Ranger, Hampie F. Ott, St. Matthews, S. C.

Charleston Unit Ranger, K. W. Leland, Charleston, S. C.

Cherokee Unit Ranger, B. T. White, Gaffney, S. C.

Chester Unit Ranger, J. Gill Simpson, Chester, S. C.

Chesterfield Unit Ranger, W. M. Smith, Chesterfield, S. C.

Clarendon Unit Ranger, Elliott E. Rose, Manning, S. C.

Colleton Unit Ranger, E. H. Benton, Walterboro, S. C.

Darlington Unit Ranger, Alton Yarborough, Darlington, S. C.

Dillon Unit Ranger, Ernest S. Oliver, Dillon, S. C.

Dorchester Unit Ranger, Carlisle Haskell Durr, St. George, S. C.

Edgefield Unit Ranger, S. G. Reel, Edgefield, S. C.

Fairfield Unit Ranger, R. E. Patrick, Winnsboro, S. C.

Florence Unit Ranger, Hugh Cusaac, Florence, S. C.

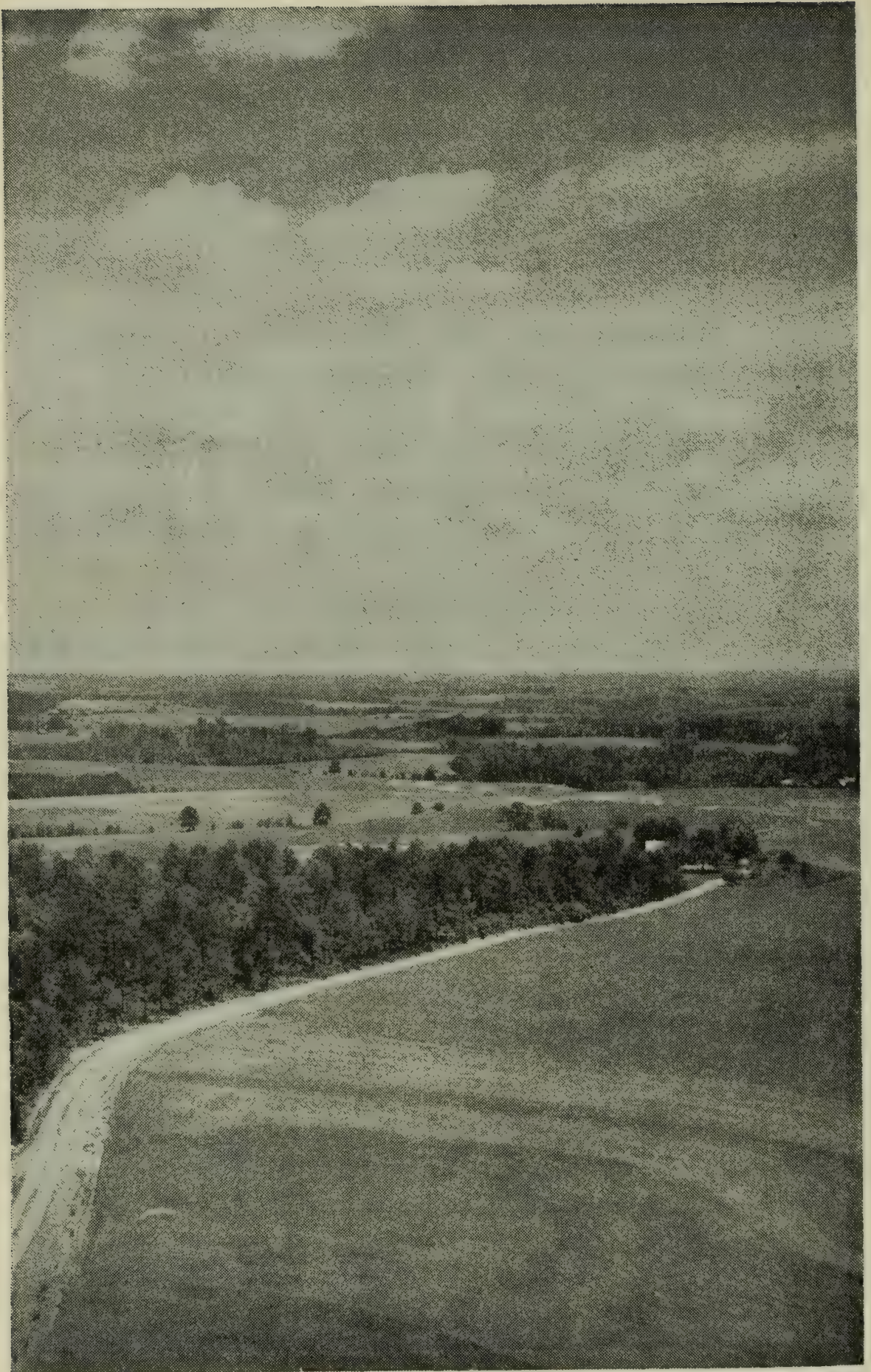
Georgetown Unit Ranger, Laurin T. Sessions, Georgetown, S. C.

Greenville Unit Ranger, G. G. Paris, Greenville, S. C.



Greenwood Unit Ranger, James C. Smith, Jr., Greenwood, S. C.  
 Hampton Unit Ranger, J. D. Peeples, Early Branch, S. C.  
 Horry Unit Ranger, W. E. Watts, Conway, S. C.  
 Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland, S. C.  
 Kershaw Unit Ranger, L. E. Smith, Camden, S. C.  
 Lancaster Unit Ranger, A. A. Plyler, Lancaster, S. C.  
 Laurens Unit Ranger, H. E. Martin, Laurens, S. C.  
 Lee Unit Ranger, E. B. Stuckey, Bishopville, S. C.  
 Lexington Unit Ranger, V. S. Bickley, Lexington, S. C.  
 Marion Unit Ranger, Hoyt Collins, Marion, S. C.  
 Marlboro Unit Ranger, B. T. Clark, Bennettsville, S. C.  
 McCormick Unit Ranger, G. L. Sharpton, McCormick, S. C.  
 Newberry Unit Ranger, Marvin E. Wilson, Newberry, S. C.  
 Oconee Unit Ranger, D. O. Morgan, Walhalla, S. C.  
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg, S. C.  
 Pickens Unit Ranger, C. H. Gravely, Pickens, S. C.  
 Richland Unit Ranger, T. W. Cooper, Columbia, S. C.  
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda, S. C.  
 Spartanburg Unit Ranger, Charles E. Turpin, Spartanburg, S. C.  
 Sumter Unit Ranger, L. G. Cubbage, Sumter, S. C.  
 Union Unit Ranger, James G. Long, Union, S. C.  
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree, S. C.  
 York Unit Ranger, E. G. Foster, York, S. C.





The major functions of the S. C. State Commission of Forestry are: assistance to private woodland owners in the protection of their forest lands from fire, in the development and management of their woodlands and in harvesting and marketing of their forest products; and the establishment, development and operation of a system of state parks.



## SUMMARY

The fiscal year covered by this report is the twenty-seventh year of service to the people of South Carolina by the State Commission of Forestry. Demands for these services continued at a high level in all phases of the Commission's activity. The problems and objectives of the Commission are outlined briefly in this introductory summary. A more detailed report by branches of activity follows this initial summary.

### Forest Fire Protection:

Much progress has been made by the Commission in its forest fire control program. More mechanical fire-fighting equipment and better communications are being made available, resulting in greater efficiency in bringing going fires under control. The fire control organization is becoming better organized and better trained to render greater assistance to the landowners in all forest fire control activities.



Illegal fires have annually burned an average of 139,000 acres, representing a considerable loss to landowners, to industry, and to the state—a loss which landowners and South Carolina can ill afford.

For the past five-year period, an average of 6300 illegal woods fires have been fought annually by our organization. These fires have annually burned an average of 139,000 acres, representing a considerable loss to our landowners, to industry, and to the

State—a loss which our landowners and South Carolina can ill-afford. Such a record clearly indicates the inadequacies of our present program, particularly in the field of fire prevention education. Such a record underscores the need for an intensified fire control program, particularly in the field of fire prevention education in order to reduce our average area burned to 55,000 acres, a goal which is considered adequate protection necessary to economical forest operations by our landowners.

Too, as time goes on, the job of controlling fires becomes more difficult and more expensive to perform. With year after year of protection, denser stands of bigger trees can be expected, which will require greater skill and different equipment to accomplish and maintain adequate protection. It is necessary that the Commission of Forestry readjust its plans, organization, and equipment, from time to time, in order to give it the ability to perform the job prescribed by conditions which are ever-changing.

### **Forest Management**

The major emphasis of the Commission's forest management program was again directed towards assisting the small, private owners with their woodland management problems. That this service program is of major importance is borne out by the fact that three-fourths of the woodland area in the state is still in small, private ownerships. Public ownership including state, federal, and municipal amounts to only 7% of the total woodland area of the state. The larger industrial ownerships and other large owners control approximately 20%. The remaining woodland is owned by more than 105,000 individuals. These small ownerships contribute a substantial part to the timber wealth of the state. On the average, the cutting practices followed by the small ownership group are the poorest.

During the year the Commission foresters made woodland examinations on 945 separate woodland areas covering approximately 143,347 acres. A total of 12,264,641 board feet of sawtimber was marked and 8,467 cords of pulpwood marked. Commission foresters assisted many more landowners in getting a private forester or industrial forester to selectively mark sawtimber or pulpwood.

The average price received by landowners for selectively marked sawtimber was higher than the average for timber sold by the "boundary" or "diameter limit" basis.





South Carolina's forests are one of the state's most valuable resources. Commission foresters assist woodland owners in handling their timber according to sound forestry practices.

The Commission's Horace L. Tilghman Forest Tree Nursery at Wedgefield produced 36,000,000 seedlings for South Carolina landowners in 1953-54. This was an all time high in production of trees by the Commission of Forestry. Orders were received for all seedlings produced prior to the end of the shipping season.

Even at the rate of 36,000,000 trees a year some 45 years would elapse before all of the areas in need of planting in the state could be planted. There is an estimated 1,500,000 acres of idle or unproductive land that will require planting before it can become productive.

The four state forests operated by the Commission represent only 1% of the forest land in the state. These forests are operated as "proving grounds" for forestry techniques and as demonstration areas. They are rapidly becoming self-sustaining and within a few years should return a profit to the state above operational cost.

Another major activity on the state forest lands is the converting of worthless scrub oak lands back to production of pine. The rate of this conversion was speeded up considerably in 1953-54 with approximately 800 acres being treated.



### State Parks:

The importance of the service rendered South Carolina by its system of 22 State Parks can be visualized by the fact that over 3 million visitors used them during 1953-54. Repeated use is emphasized by the fact that the total population of South Carolina is slightly more than 2 million people. Attendance has increased six fold in the past 10 years, and has exceeded 3 million for the past three years.



Boating, fishing, swimming, picnicking, hiking, camping, and other healthful outdoor activities can be enjoyed at South Carolina state parks.

The need for adequate maintenance of existing facilities and for certain additional facilities to keep pace with this growth is evident in the light of the conservation of human resources. Mental health and stability of families are direct results of wholesome outdoor recreation in the naturalistic setting of South Carolina's State Parks. With increased leisure on the one hand, and the tension of our times on the other, State Park values cannot be reckoned in dollars and cents.

Improved and additional facilities for Negroes are needed for more equitable service to our people.



### **Administration:**

The Commission of Forestry because of financial inability to adjust inequality in individual's salaries and to give merit increases, continued to lose both technical and other personnel. A total of 77 employees resigned during the year, of which 84% were county personnel.

The Commission budgeted and spent on all phases of the Forestry and Park Program \$1,890,049.88, and of this total the Division of Forestry expended \$1,444,183.64 and the Division of State Parks \$445,866.24. (See financial sheet for detailed explanation of funds available and expenditures made.) State appropriated funds amounted to \$1,082,118 for the Division of Forestry and \$359,692 for the Division of State Parks.

### **Information and Education:**

As demands for the Commission's services continued to increase, the requests for information and education services increased in direct proportion. It is the function of this branch to keep the people of South Carolina informed on forest conservation and state park matters. It is also its function to serve as a public relations organization to each of the other branches of the Commission activity.

During the early part of 1953-54 it became evident that a bumper crop of 36 million forest tree seedlings would be available to South Carolina landowners. The year before, 1952-53, any landowner in the State could obtain 3,000 seedlings free on request, but even with this incentive orders were received that year for only 26 million trees. This year the free tree seedling provision was not in effect. With the wholehearted cooperation of private industries and public agencies concerned with the field of agriculture the entire crop of 35 million trees was sold nearly two months before the end of the shipping season. However, past experience has demonstrated the need for a continuing program of education in order to have a successful program of encouraging South Carolina landowners to put idle lands back to work.

Education has played its part in forest fire occurrence as evidenced by the average annual reduction of 1,000 fires per year for the three years ending with the calendar year 1953. The need for renewed efforts in forest fire prevention, however, is clearly





Education of our children, the citizens and landowners of the future, is a vitally important part of the varied activities of the Branch of Information and Education of the State Commission of Forestry. A Commission forester (left) is teaching Boy Scouts by having one of the group point out little trees provided by nature as he discusses forest values as shown in this photograph by the Soil Conservation Service, one of the groups with whom the Commission cooperated in the above project.

demonstrated by the occurrence of 5,087 fires during the first six months of 1954, which was one of the most severe drought periods in recent times. As progress in fire prevention is made, the value protected increases. If the year 1954 is an indication, the fire season in South Carolina can be expected to include the summer months as well as the fall, winter and spring.

As the demand for forest products continues at a high level the financial opportunity of sound forest management also continues. Educating people to these opportunities is a major function of the Commission. This year more examinations of woodland properties were made as a result of requests of Commission foresters for assistance than any previous year except one.

Developing a full appreciation and proper use of state parks is an educational function of the Commission. There is a substantial



demand for information on state parks not only from within the state but also from many other states.

### **Recommendations:**

(1) An intensified forest fire prevention program designed to reduce fire occurrence to a minimum.

(2) Additional heavy power equipment, hand tools, and completion of the radio communications system to further intensify forest fire suppression and reduce excessive losses; the revision of existing fire laws to prevent use of fire in woods during critical periods.

(3) Adequate maintenance of existing capital improvements, equipment and tools.

(4) Maintain an adequate production of forest tree seedlings to provide landowners to reforest the 1½ million acres of idle land in the state.

(5) Intensify the Commission's over-all educational program that would develop a public awareness of the need for forest conservation; a program that would prevent forest fires from occurring, that would encourage intelligent timber harvesting to yield a greater production per acre per year, and one that would encourage the planting of idle land to trees. Such a program of informing the people of the state would also help guard against insect and disease attack. It would acquaint landowners with ways to eliminate weed species of trees to permit better yields of higher valued products. It would teach a more intelligent use of state park facilities to the end that people would enjoy and appreciate the natural beauty and value of South Carolina and become conservation minded citizens.

(6) Intensify forest disease and insect prevention and control.

(7) Begin an intensified program of forest research.

(8) Rehabilitate the four state owned and leased demonstrational forest areas to bring them into full production without further delay.

(9) Adequate operations and facilities for the existing state parks to keep pace with the greatly increased public use.

(10) Provide adequate state park facilities for Negroes.

(11) Provide adequate salaries and wages for personnel to assure continued employment and a stable organization of competent employees.





Coordination of forces available for fire suppression is a highly important factor. Aircraft played an important role in helping to direct the activities of men and equipment on a number of large fires resulting from extended dry conditions.



## FOREST FIRE PROTECTION

Progress in forest fire protection may only be properly measured in terms of the average annual occurrence of fires and area burned over a period of years. For the past five-year period, an average of 6300 illegal woods fires have been fought annually by our organization. These fires have annually burned an average of 139,000 acres, representing a considerable loss to our landowners, to industry and to the State—a loss which our landowners and South Carolina can ill afford.

Such a record falls far short of our goal of 2500 fires and 55,000 acres burned annually, which is considered adequate protection necessary to economical forest operations. Such a record is indicative of much needed improvement in all phases of the program.

Much progress is being made in ways and means of combating fires. More mechanical fire-fighting equipment and better communications are gradually being made available, resulting in greater efficiency in bringing going fires under control. As time goes on, however, the job of controlling fires becomes more difficult and more expensive to perform. With year after year of protection, denser stands of bigger trees can be expected which will require greater skill and different equipment to accomplish and maintain adequate protection.

Just as important, however, is the continuing need to reduce our annual fire occurrence. It is believed that more landowners each year are seeking means of preventing occurrence of uncontrolled fires on their holdings. Still, the process is slow, and statistics do not indicate satisfactory progress in reduction of fire occurrence. Far greater intensification of the fire prevention education program is required to bring about the desired reduction in fire occurrence within a reasonable period of time. Ability to concentrate fire control personnel and equipment on fewer fires can well bring about achievement of adequate protection of our forest resources.

While there is much yet to be done to improve our fire protection program, the following pages describe in some detail the Commission's fire control organization and its activities and accomplishments during the fiscal year 1953-54.

## FOREST AREA PROTECTED

The Commission of Forestry cooperates with forest landowners in furnishing intensive fire protection for all state and privately-owned land in South Carolina. The total area comprises 11,300,008 acres, of which approximately 169,574 acres are state-owned parks and forests. The U. S. Forest Service protects a total of 584,492 acres within national forest boundaries. Other federal agencies own and protect 58,100 acres. These federal areas are administered by the various U. S. Government branches and are not included in the state-wide protection acreage total.

## FOREST FIRE PROTECTION ORGANIZATION

All fire protection work in each county is conducted on a co-operative basis between the S. C. State Commission of Forestry and the landowners. The Commission renders protection service whenever and wherever possible, but the landowner is not relieved of the responsibility for fires on his property. Each landowner must realize that he is responsible for organizing his own help and his neighbors into firefighting crews. The Commission personnel can only assist in the prevention and suppression activities.

The administration of all forest fire protection activities is supervised by the central Fire Control Branch in Columbia. The state is divided into seven forest districts. Each of the seven District Foresters is responsible for the administration of all forestry activities within his respective district.

### County Units:

Forest fire protection work in each county unit is supervised by the individual unit rangers, who are responsible to the District Forester. The unit ranger is assisted by unit wardens, towermen, tractor operators, and flexible crews, all of which make up a standard county unit organization.

In addition to the technical fire control personnel in the central and district offices, a total of 356 persons was employed in fire protection and suppression work on full-time. This number includes 46 rangers, 133 wardens, 40 tractor operators, and 137 towermen. A total of 22,834 persons volunteered their assistance to the regular unit organizations in fire suppression work through-



out the state. Out of this total, some 660 individuals were organized into community crew members who had been furnished some equipment and training.

### **State Forests and Parks:**

The Branch of Fire Control cooperates very closely with the individual State Forest Directors and State Park Superintendents in the prevention and suppression of woods fires on these state-owned lands. Each of the state parks has been furnished with a detailed fire plan outlining procedure for both prevention and suppression activities. All of the state forests have similar plans which have been in use for a number of years.

### **Cooperative Agreements With U. S. Forest Service:**

The U. S. Forest Service and the Commission of Forestry have mutually agreed to assist one another with the detection and suppression of fires which occur along either side of the national forest boundaries. Further, the Commission of Forestry has agreed to furnish protection to certain areas within the national forest boundaries in those localities, where most of the land is privately owned. In other areas within national forest boundaries, where the majority of the property is federally owned, the U. S. Forest Service assumes responsibility for protection of certain areas which normally would fall under the responsibility of the Commission of Forestry. These agreements greatly increase the overall efficiency of the suppression efforts of both organizations.

## **FIRE PROTECTION ACTIVITIES**

### **Training:**

The Commission continued its intensive fire control training program again this year. The vast majority of the training this year was conducted on a local basis, with emphasis on training the individual for the job, for which he is responsible.

A state-wide meeting of all district personnel was held in Sumter during October to familiarize them with coordinated plans for carrying out the new intensive unit and individual training program. At this meeting, the district offices were furnished with materials and information necessary for analyzing





The weekly meeting of the county ranger and his wardens is part of the year 'round training program that is carried out in every county in the state.

the qualifications of each individual in the county unit organization and also an outlined procedure for bringing all work performances up to prescribed standards. As a result of this training school, the regular weekly Ranger-Warden Meetings were greatly improved and put to much better use. These meetings are held each Monday morning. Training has become a regular part of this meeting along with preparation of weekly work plans and routine work. Each week during this meeting, the ranger gives some timely prepared training to his men, either individually or as a unit. District office personnel regularly attend these meetings and give supplemental training to the unit or to individuals. District personnel make good use of Monday afternoons by continuing with individual training or by working with unit personnel on some specific fire control problem.

The present training program, designed and tailored for the individual and aimed at improving his performance in all phases of fire control activity, has proven greatly superior to the old large group-type training. Fire control is being daily improved by good, efficient training.



County unit fire prevention schools were conducted by members of the central office Fire Control and I & E Branches. The purpose of these schools was to discuss with county personnel the various fire prevention materials and training aids available for carrying out an intensive prevention contact program with schools and landowners.

A number of equipment training sessions were scheduled throughout the state to familiarize equipment operators with the proper procedure for operating and maintaining the mechanized equipment, which they used in suppressing forest fires.

### **Inspection:**

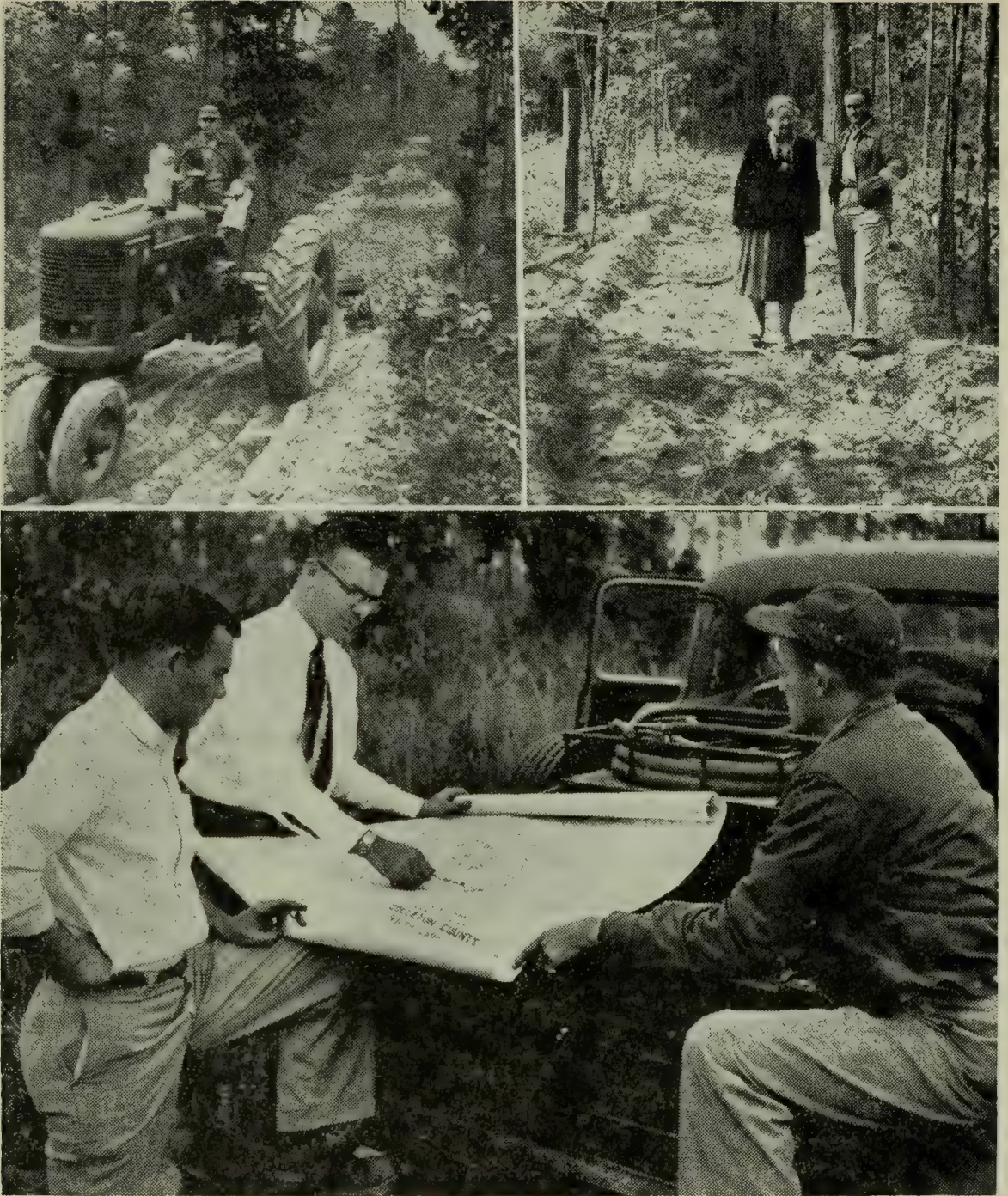
The purpose of the unit inspection program is to determine the overall efficiency of the county unit organization. Detailed inspections were made in each county of the state during the year. These inspections were conducted by district office personnel and members of the central fire control office. Immediately after each inspection has been conducted, a detailed report is prepared outlining the general condition of the county and necessary measures which are needed to bring all activities up to prescribed standards. In addition to the regular unit inspections, periodic motor vehicle inspections are conducted by the travelling mechanics. The purpose of these mechanical inspections is to determine the mechanical condition of all automotive equipment and initiate steps to keep the equipment in a good state of maintenance and repair.

### **Fire Plans:**

All county unit organizations have been furnished with a detailed forest fire control plan which outlines procedures for the control and operation of fire suppression activities. These plans are constantly revised to conform with current conditions and operating procedures.

In addition to the regular unit fire plans, a number of similar plans have been prepared for various landowners throughout the state who are desirous of maintaining adequate protection for their timberlands. These plans follow the same general outline as the unit plans, in that they outline the forest hazard conditions





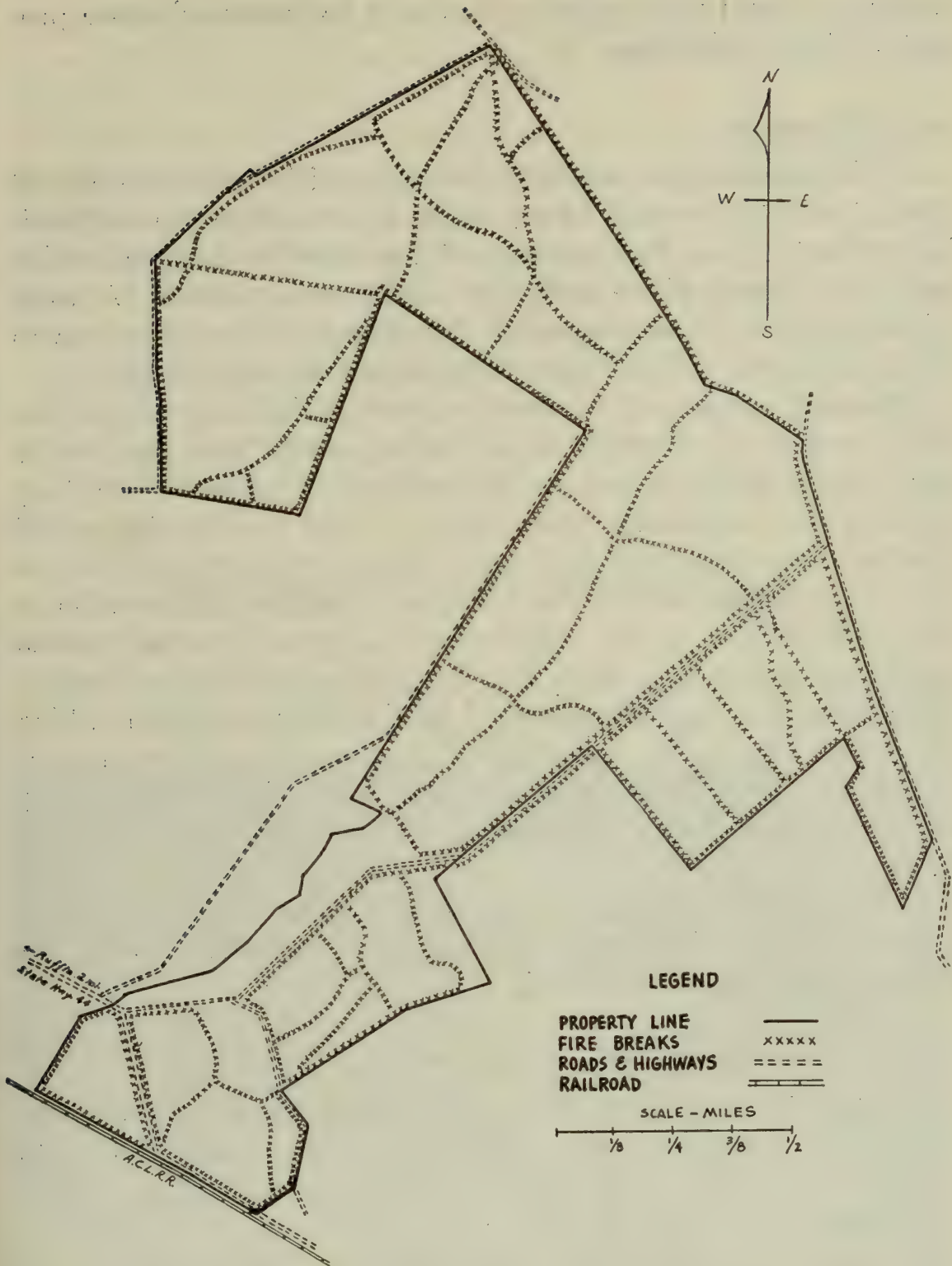
Adequate forest fire protection in South Carolina is based on the fact that the landowner is the steward of his property and is the individual primarily responsible for the control of all fires on his land.

Mrs. Tom Black and her family of four sons and one daughter represent a striking example of the measures that can be taken by landowners to protect and manage their forest lands to afford maximum returns. As a service to landowners, foresters of the S. C. State Commission of Forestry assisted in the preparation of a fire protection plan.

Farm type equipment (upper left) is used to construct and maintain an extensive firebreak system which divides the property into many protection blocks (see map on opposite page).

Mrs. Black and one of her sons (upper right) inspect one of the firebreaks that lies along the boundary of their property located near Ruffin in Colleton County.





Lower photo on opposite page shows three brothers with their pickup truck equipped with power pump and booster tank, two-way radio and other equipment which they use to control and suppress fires on their property.

All efforts directed toward the prevention and suppression of wild fires on this property are closely coordinated with the program of the S. C. State Commission of Forestry.

which exist and also measures necessary to assure adequate protection from wild fires.

#### **Law Enforcement:**

All illegal fires are carefully investigated by county unit and district office personnel in an effort to determine the responsibility for the fire. Enforcement of the state fire laws is carried out in all cases where sufficient evidence is secured. A total of 248 persons were prosecuted for allowing fires to escape to lands of others. Of this total, 234 persons were convicted.

The burning permit law now in force in eight counties of the state requires all persons to secure a permit from the county fire control organization or an authorized agent before they burn brush, hedgerows, woodlands or field during the period October 15 to May 15 of each year. This law is very beneficial to the county organizations, inasmuch as it supplies information to the personnel as to the location and approximate time when burning is scheduled. Then too, the landowner is given instructions regarding safe handling of his burning operation, which naturally reduces the possibility of fires escaping. The counties which now have burning permit laws are Aiken, Orangeburg, Greenville, Georgetown, Charleston, Marlboro, Horry and Colleton.

A total of 9,386 permits were issued during the fiscal year in those counties which have permit laws. Of all fires covered by these permits, only 10 escaped.

#### **Southern States Fire Control Conference:**

The Southern States Fire Control Chiefs met jointly with the Information and Education Chiefs, Radio Engineers and State Foresters at Little Rock, Arkansas, in June of this year. The coordinated efforts of all of the administrative personnel from the various southern states were directed toward the improvement of the overall fire protection program throughout the South.

#### **Interstate Forest Fire Protection Compact:**

During the 1954 Session of the South Carolina General Assembly, an Act was passed which provided that South Carolina may enter into a compact with any one or more of the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Caro-



lina, Tennessee, Virginia and West Virginia, to provide effective prevention and control of forest fires in the Southeastern Region of the United States.

Implementation of the Compact calls for the development of integrated forest fire plans, the maintenance of adequate forest fire fighting services by the member states, provision for mutual aid in fighting forest fires among the compacting states of the region and with states which are parties to other regional forest fire protection compacts, and for more adequate forest protection.

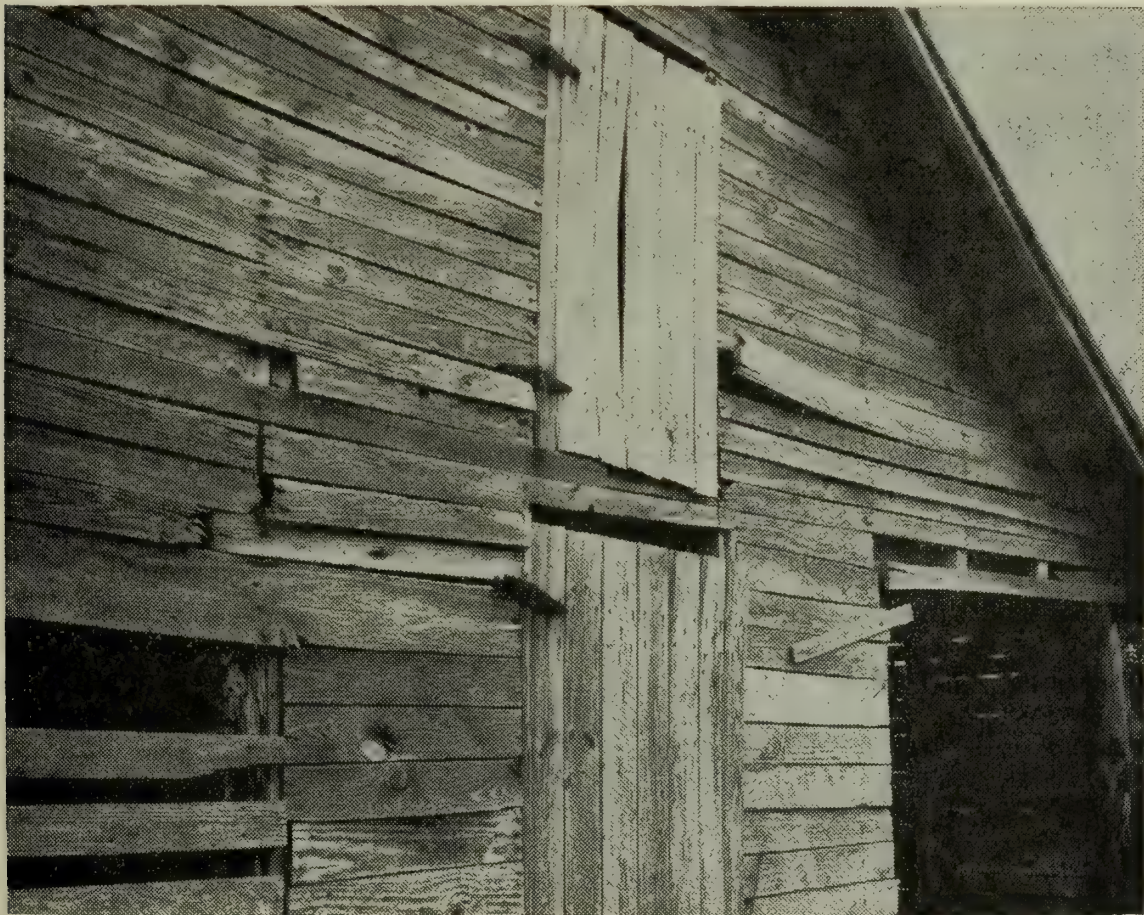
The Act was approved by the Governor on March 26, 1954. The Congressional Consent Act, required to validate the State Acts, was still pending at the end of the fiscal year.

Implementation of the Compact is scheduled during the 1954-55 fiscal year.

### IMPROVEMENTS, TOOLS AND EQUIPMENT

#### Lookout Towers:

There are 157 lookout towers in South Carolina, of which 133 are owned by the Commission. Of these towers, 121 are steel



In addition to maintenance of dwellings, many other tower unit buildings constructed some years ago are now in need of extensive repair.



and 12 are constructed of wood. It is planned to replace the wooden towers with steel ones in the near future, the wood towers rapidly becoming unsafe for continued use.

#### *Tower Unit Buildings:*

There are at present 23 towersites which do not have dwellings for the tower personnel provided by the Commission. Thirty-nine sites are without necessary barns and other outbuildings which make up a standard tower unit. The improvement program was halted in 1948 due to curtailment of funds necessary for completion of this project.

All of the existing towersites are in need of intensive maintenance work, which is estimated to cost approximately \$50,000. New roofs, painting and replacement of sills, porch decks and other general repair work are but a few of the items included in this estimate.

No ready remedy is at hand to relieve this situation, as there are no adequate provisions in our present working budget for this item.

#### **Telephone:**

Telephone line improvements during the fiscal year consisted of the usual routine maintenance work, which is required to keep any telephone system in good operating condition. Poles, brackets and insulators were replaced as necessary, right-of-way was kept cleared of trees and underbrush which endangered the proper operation of the lines, and transmission troubles which developed on the lines were cleared to the extent that no major inconvenience was experienced in operating the system during the year.

During the year approximately 50 miles of telephone line in various parts of the state which had become surplus to the needs of the Commission, because of replacement by two-way radio, was salvaged.

In line with the Commission's policy of modernizing and improving telephone service to the greatest possible degree, the old magneto system in Richland County was converted to dial operation during the year.

The practice of selling telephone lines for the purpose of obtaining funds for the purchase of two-way radio was continued during the year with the resultant sale of approximately 58.0

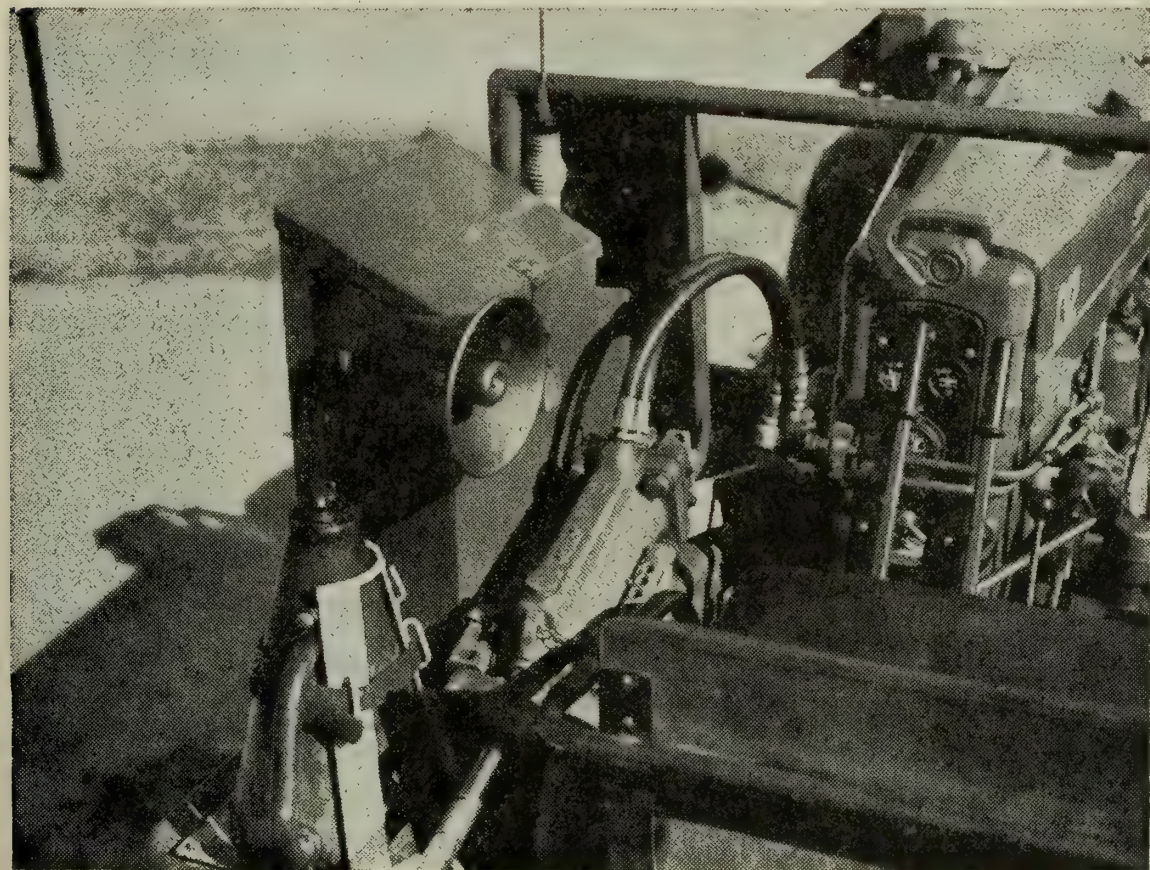


miles of standing line structure, approximately 1500 salvaged poles and approximately 15.0 miles of salvaged wire. Radios were purchased with receipts from the sale of line and materials and were installed in stations and vehicles affected by the sales. By authorization of the General Assembly, the Commission has been allowed to sell telephone lines and materials to obtain funds for the purchase of radio, for the past several years, which has made possible the considerable expansion of the Commission's radio system.

At the end of the fiscal year, the Commission is still operating a telephone system consisting of 1,454 miles of line. It is anticipated that at least a part of this remaining mileage can be sold and replaced by radio in the future.

### Radio:

In the fiscal year 1953-54 the radio program was augmented considerably by the purchase of \$120,000 worth of equipment. Of this amount, \$60,000 were matching funds allotted by the



Two-way radio is now being installed on tractor units which improves immeasurably the coordination of forces used to suppress a going fire. The unit can be contacted immediately either on standby anywhere in the county or while plowing on the fire line.



Federal Civil Defense Administration. The \$60,000 of state funds consisted of \$37,000 deficiency appropriation and \$23,000 of funds for radio equipment purchase budgeted during the fiscal year by the Commission of Forestry.

The equipment purchased consisted of 65 base stations, 76 mobile units, and 55 house receivers.

Part of this equipment has already been installed in Aiken, Allendale, Bamberg, Berkeley, Calhoun, Cherokee, Chesterfield, Clarendon, Colleton, Darlington, Dorchester, Edgefield, Fairfield, Florence, Georgetown, Horry, Kershaw, Marion, McCormick, Saluda, Sumter, Union and Williamsburg Counties. Installation of the remaining equipment is being expedited, though some months will be required for completion.

All equipment purchased with Civil Defense matching funds will remain the property of the Forestry Commission and will be used primarily in the detection and suppression of forest fires. However, the radio system will also be used in cooperation with the Director of Civil Defense to alert the several communities in event of natural disasters or enemy attack.

The total equipment owned by the Commission on June 30, 1954 is as follows:

173 Base Stations  
204 Mobile Units  
90 House Receivers

One additional radio technician was employed, making a total of three men who carried out the installation and maintenance program on Commission-owned equipment, as well as, 50 mobile units owned by private cooperators.

#### **Use of Aircraft in Fire Control:**

The Branch of Forest Fire Control has just ended its fourth year in which limited use of aircraft was made in forest fire control work.

Nearly twice as many flight hours were flown as compared to the previous year. Men on the fire lines working under the most severe conditions have learned of the tremendous assistance that an aerial observer, equipped with two-way radio, can render, and are demanding this type service, which was furnished where needed to the limit of closely budgeted funds.



The five most valuable uses for aircraft in fire control work are:

1. Fire detection, including identification, location and appraisal.
2. Direction and supervision on large fires.
3. Direction by two-way radio of crews in unfamiliar areas.
4. Patrolling large fires that have been brought under control for breakovers and spot fires.
5. Patrolling on days of poor visibility, when smokes cannot be picked up by towers.

An experienced fire control supervisor can quickly scout a large fire from the airplane and rapidly develop a plan of attack. Information relayed to the fire boss on the ground enables him to construct firebreaks to the best advantage, taking advantage of natural barriers, such as roads, streams and swampy areas.

The manpower and firefighting equipment on many large fires was supplemented by air patrol during the year. The Commission has a lease agreement to use a privately-owned plane on a contract basis. The Commission installs two-way radio equipment and provides an observer for each air patrol flight.

On several occasions, under very critical conditions, the South Carolina National Guard made a light airplane and pilot available for air patrol. The Commission furnished an experienced aerial observer and two-way radio equipment to enable him to contact firefighting crews on the ground.

During June, on one of the largest forest fires ever handled by the Commission, two helicopters were used to direct the firefighting activities. These were furnished by the U. S. Coast Guard and from Shaw Air Force Base by the U. S. Air Force. Commission observers and radio equipment flew with the service pilots on air spotting missions.

As in past years, the West Virginia Pulp and Paper Company of Charleston used a company plane to patrol company-owned forest properties during periods of high fire danger. In addition, the Company cooperates with the Commission by providing this service to other privately-owned forest lands in the lower part of the state.

This cooperation by the S. C. National Guard, the U. S. Coast Guard, the U. S. Air Force and West Virginia Pulp and Paper

Company was extremely valuable to the Commission in carrying out its job of protecting the forest lands of the state from fire.

From experience gained in this state, and other states where more intensive use of aircraft has been made by the forestry services, it is believed that air patrol should be greatly intensified by the Commission as a means of greater efficiency in both fire detection and suppression.

### Fire Danger Measurement:

Forest fire danger measurement stations are located in each county of the state. The information obtained from these stations is relayed to county personnel twice daily. Unit rangers use the various burning index and danger index ratings as a guide in planning the daily activities of the unit personnel. During periods of high fire danger, all individuals are on standby duty and available to answer fire calls. On low class fire days personnel carry out routine maintenance work, fire prevention activities and other jobs which take them away from communications systems. Average records for the state indicate the following number of class fire days for each of the five major ratings: 97 Class No. 1 days, 130 Class No. 2 days, 112 Class No. 3 days, 25 Class No. 4 days, and 1 Class No. 5 days.

## ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

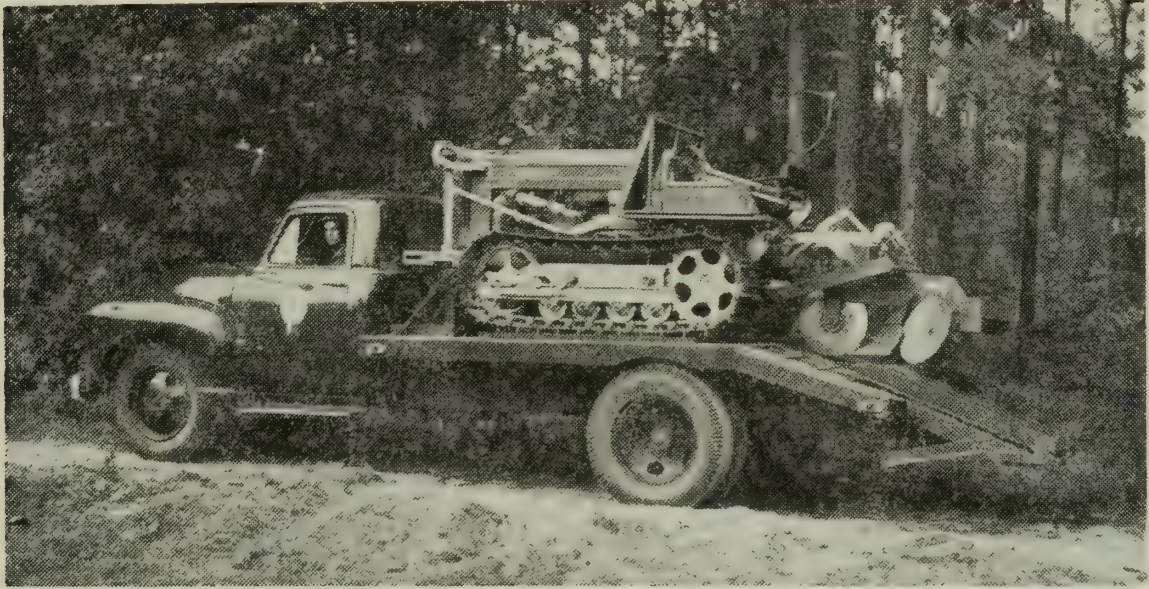
(Based on Replacement Value)

<i>Items</i>	<i>Value</i>
134 Lookout Tower Units.....	\$2,942,503.00
1177 Miles Truck Trails.....	1,415,230.00
1454 Miles Telephone Line.....	436,000.00
46 Fire Danger Measurement Stations.....	3,450.00
Radio: 8 Remote Control Base Stations.....@ \$1200	\$ 9,600.00
25 50 watt Base Stations.....@ \$ 900	10,800.00
140 10 and 30 watt Base Stations.....@ \$ 535	74,900.00
204 10 and 30 watt Mobile Units.....@ \$ 400	81,600.00
90 House Receivers.....@ \$ 240	21,600.00
	<hr/> 198,500.00
Total.....	\$4,995,683.00



## EQUIPMENT

During the year five (5) new trucks and tractors were purchased from a special appropriation for assignment to the areas not previously equipped.



There are some 40 light suppression units located in areas of greatest fire danger throughout the state. Some 20 additional units are needed before the protection provided is considered adequate.

The transport body pictured above is constructed at the Commission's maintenance shop at Sumter; the plow was developed by the Commission of Forestry and is adaptable to farm type equipment.



One new heavy crawler tractor and transport truck unit was purchased and assigned to the lower half of the Walterboro District.

Nine (9) new pickup trucks were purchased as replacements for worn ranger trucks. Ten (10) new 1½ ton units were purchased as replacements in the counties to transport tractors.

Two (2) new light crawler tractors were purchased to replace two old wheel-type tractors in two counties.

## INVENTORY FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1954

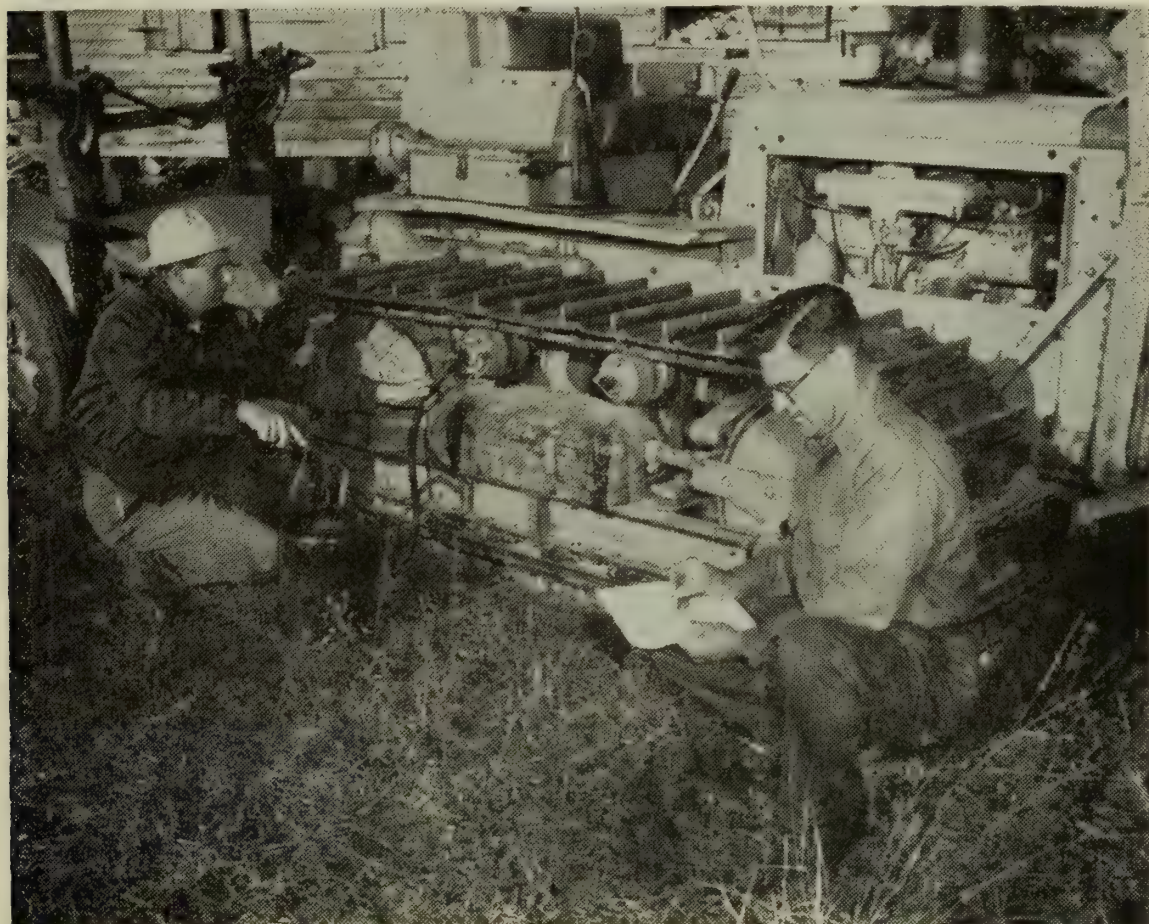
<i>Items</i>	<i>Values</i>
2759 Back Pack Pumps.....	\$ 38,576.00
5440 Fire Rakes.....	14,960.00
2814 Fire Swatters.....	8,019.90
4 Heavy Crawler Tractors.....	32,000.00
1 Medium Crawler Tractor.....	6,800.00
11 Light Crawler Tractors.....	27,500.00
29 Light Tractors w/Track System.....	66,700.00
10 Heavy Duty Fire Plows.....	7,800.00
1 Medium Duty Fire Plow.....	450.00
40 Light Duty Fire Plows.....	9,000.00
3 ¼ Ton Jeeps w/Fire Plow.....	5,400.00
40 Light Equipment Transport Trucks.....	104,000.00
4 Truck Tractors, HD.....	14,400.00
6 Transport Trailers.....	15,600.00
47 Ranger Pickup Trucks.....	79,900.00
5 Sedan Delivery Trucks.....	9,000.00
1 1½ Ton Stakebody Truck.....	2,250.00
1 Heavy Duty Transport Truck.....	3,300.00
42 Booster Pumps w/Tanks.....	17,430.00
1 ½ Ton Pickup Truck.....	3,100.00
	\$466,185.90

### Equipment Maintenance Shop:

In order to facilitate maintenance and repair of all fire control equipment within the state, the Fire Control Branch operates a central repair shop at Sumter.



An up-to-date program of prevention maintenance for all trucks and tractors within the protection units is handled by three travelling mechanics, who radiate from the Sumter Shop on regular schedule.



The Commission's preventive maintenance program is one of the basic means of keeping repair costs low as well as having equipment available for emergency use. The heavy suppression unit pictured above is checked and greased at regular intervals as well as after every fire on which it is used to assure a high standard of operation.

All equipment is regularly inspected, and at the time of the inspection, such repairs as are practical are made on the spot by the travelling mechanics. Jobs that cannot be handled in the field are referred to the central shop at Sumter and where this is not found economical, such jobs are placed in local commercial repair shops.

Much interest is shown by the vehicle operators in the upkeep of their equipment. This is largely due to the many training sessions that they participate in.

Many of the repair jobs that are encountered are of a highly specialized nature, and for that reason, a lot of this work cannot be handled in commercial shops.

Some of the work handled by the Fire Control Central Shop this year is listed below:

<i>Repairs to:</i>	<i>No. Jobs</i>
Light tractors .....	86
Heavy tractors .....	8
Light plows .....	39
Heavy plows .....	11
Heavy trailers .....	2
Booster tanks .....	27
Light trucks .....	65
Heavy trucks .....	56
Inspections of equipment.....	403
Repair jobs in the field.....	450

Special jobs:

1. Manufactured:

- (a) 25 welded steel radio boxes
- (b) 100 steel backfire torch racks
- (c) 1 tandem axle equipment trailer
- (d) 37 H.D. tractor links
- (e) 16 equipment transport bodies w/ramps

2. Handled:

- (a) 4 training sessions
- (b) 11 equipment demonstrations

## FOREST FIRE SUMMARY

### Illegal Fires:

The 1953-54 fire season followed the general trend of the past few years in that relatively high fire occurrence was experienced on through the summer months. Fire occurrence was somewhat consistent with the average amount of rainfall experienced over the state. Only two months during the entire fiscal year showed an above-normal amount of rainfall. These months were September and December. All other months varied from slightly below normal to as much as minus 2.76 inches of rain. Total rainfall for the state for the fiscal year averaged 40.38 inches, which is 6.98 inches below normal. During the month of June, the state average of 1.85 inches was 2.76 inches below normal, and was the least rainfall for June since the recording of precipitation was first commenced by the U. S. Weather Bureau in 1887.





On June 27, 1954 a careless match or cigarette tossed from a passing automobile on Highway 501 between Conway and Myrtle Beach touched off the most costly and difficult fire to suppress in the history of statewide fire protection.

Above, multiple firebreaks were plowed around its perimeter of 25 miles before it could be brought under control by three of the twenty-one heavy tractor units which were used in fighting this fire.

Below is pictured some of the damage done to young timber that covered much of the 10,162 acres that were burned.

(Photos by Commission of Forestry from U. S. Air Force helicopter).



During the fiscal year, a total of 6,532 illegal fires burned 119,149.2 acres of forest land in South Carolina. This acreage represents .91% of all the timberland under intensive protection. The average area burned per fire was 20.2 acres. The month of February proved most hazardous when 2,079 fires burned 44,736.5 acres. During this particular month, only 1.58 inches of rainfall occurred over the state. This figure represents 2.46 inches below normal. The lack of precipitation, linked with high winds, favored high fire occurrence and made fires extremely difficult to bring under control. The month of March also proved to be disastrous when 1,518 fires burned 28,568.0 acres of forest lands. Insofar as difficulty of control is concerned, the month of June was one of the most hazardous on record. Some 380 fires burned a total of 16,079.8 acres. During this month, one fire in Horry County burned a total of 10,167.0 acres. The rather hazardous conditions experienced during June may be attributed to the fact that a sub-normal amount of precipitation had been experienced for the past five months.

The average amount of rainfall experienced over the state and deviation from normal by months is shown below:

<i>Month</i>	Amount Rainfall (Inches)	Deviation from Normal (Inches)
July .....	3.74	—2.15
August .....	4.41	—1.31
September .....	6.33	+2.15
October .....	0.50	—2.32
November .....	1.63	—0.70
December .....	7.05	+3.46
January .....	3.44	+0.01
February .....	1.58	—2.46
March .....	3.59	—0.45
April .....	2.89	—0.34
May .....	3.37	—0.11
June .....	1.85	—2.76
Total .....	40.38	—6.98



**Causes of Fires:**

The greatest number of fires which were experienced during the year were caused by incendiarism. A total of 2,678 fires was attributed to this one cause. Smokers caused 1,672 fires, and debris burning 1,364 fires. These three causes accounted for 87.5% of all the fires which occurred.

**Legal Fires:**

In the event a landowner desires to burn his own timberland and confines the fire within his property boundaries, the burning is classified as legal. A total of 3,217 legal fires which burned a total of 259,934.3 acres of forest land was recorded during the year. Landowners desiring to reduce forest fire hazards set 475 fires which burned 34,950.8 acres. A total of 595 fires which burned 170,422.0 acres was started for the protection of game and improvement of hunting conditions. Burnings conducted to rid timber areas of accumulated debris and rubbish accounted for 1,059 fires which burned 8,627.5 acres. 751 fires burning 38,147.0 acres were burned on woodland pastures. 337 miscellaneous fires for various purposes, such as boll weevil eradication, destruction of ticks, etc., burned 7,787.0 acres.





Commission foresters help landowners handle their timber for maximum continuous growth and profit.



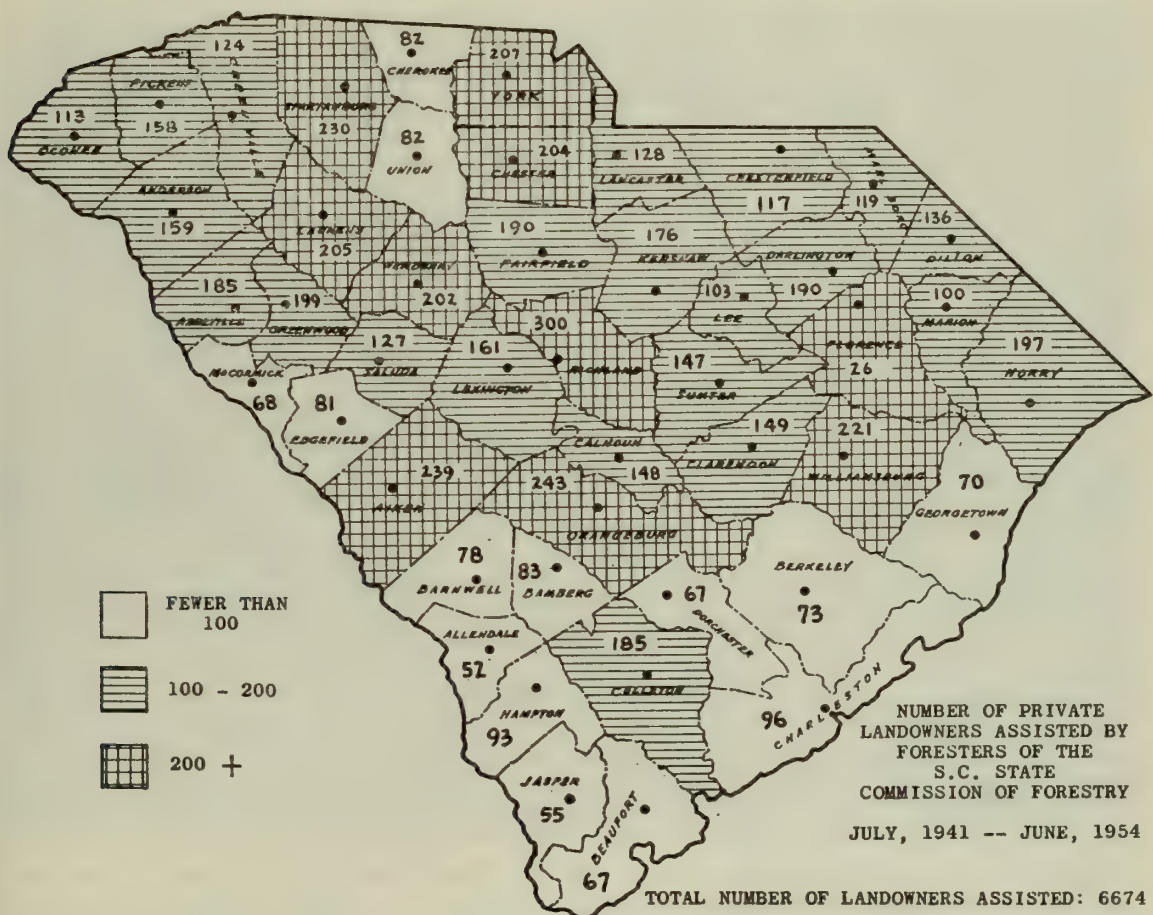
# FOREST MANAGEMENT

## Management Assistance:

The major emphasis of the Forest Management Branch activities was again directed towards assisting private landowners with their woodland management problems.

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing foresters to help landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection and reforestation measures needed.



In cases where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of ad-



vertisement and a sample timber sale agreement. The charge for this service is fifty cents per thousand board feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a distinctly technical measure and involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day, and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seed bed preparation, and control of the "Brown Spot" disease in longleaf pine. Recommendations for the use of prescribed fire are made only after a very careful analysis, with the landowners, of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.



Selective harvesting of timber yields valuable forest products for sale or home use, and keeps woodlands in good productive condition for future growth and future harvests.

During the year Commission Foresters made 945 woodland examinations on 143,347 acres of forest land, and selectively marked a total of 12,264,641 board feet and 8,467.0 cords for 331 landowners on 8864 acres of forest land. The following table



shows the continuous increase in woodland examination and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature.

Commission Foresters and Extension Foresters again followed the policy of referring all of the larger jobs and some of the smaller jobs to consulting and industry foresters wherever practical. Our records indicate 78 jobs referred to consulting foresters where properties were examined by Commission or Extension Foresters and it is estimated that at least this many jobs were referred direct to Consulting Foresters where original contact was made by Commission or Extension personnel.

### Summary by Years

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
1950-51 .....	998	173,057	339	14,275	19,634,153	3,896
1951-52 .....	919	170,948	388	11,931	18,031,822	3,088.6
1952-53 .....	931	142,054	315	12,109	16,332,715	3,935
1953-54 .....	945	143,347	331	8,864	12,264,641	8,467
Totals.....	7,462	1,601,029	2,611	168,177	225,044,091	38,216.2

Prices received from marked sawtimber for the past five years are shown in the following table:

### TIMBER SALES SUMMARY FOR SOUTH CAROLINA 5 YEAR PERIOD

Fiscal Year	No. Sales On Record	Weighted Average Price Received Per M Bd. Ft.
1949-50 .....	114	23.31
1950-51 .....	138	30.76
1951-52 .....	114	33.02
1952-53 .....	100	35.53
1953-54 .....	54	31.53

There was a definite drop in timber prices during the past twelve to eighteen months and a considerable decrease in demand for low-grade stumpage. High quality timber and large timber continued to sell very well, with the demand for low-grade timber falling off sharply. This decrease in demand was partly due to many operators not wanting to buy stumpage too far in advance of their cutting. The average price for marked timber continued to bring as good, or better, price per thousand board feet than timber sold without benefit of marking.

The annual Forest Management Training School was held at Burnt Gin Group Camp on May 18th, 19th, and 20th. The major emphasis this year was placed on management of loblolly pine and selection of trees for seed purposes. Considerable research is being done on genetics and its part in forest tree improvement, particularly in Southern forestry; consequently, one of the major classes at the Training School was devoted toward inherent characteristics of trees. These annual meetings have proven to be an excellent method of keeping our field men abreast of current and improved forestry techniques. It also provides the men an opportunity to get to know each other and to discuss mutual problems.

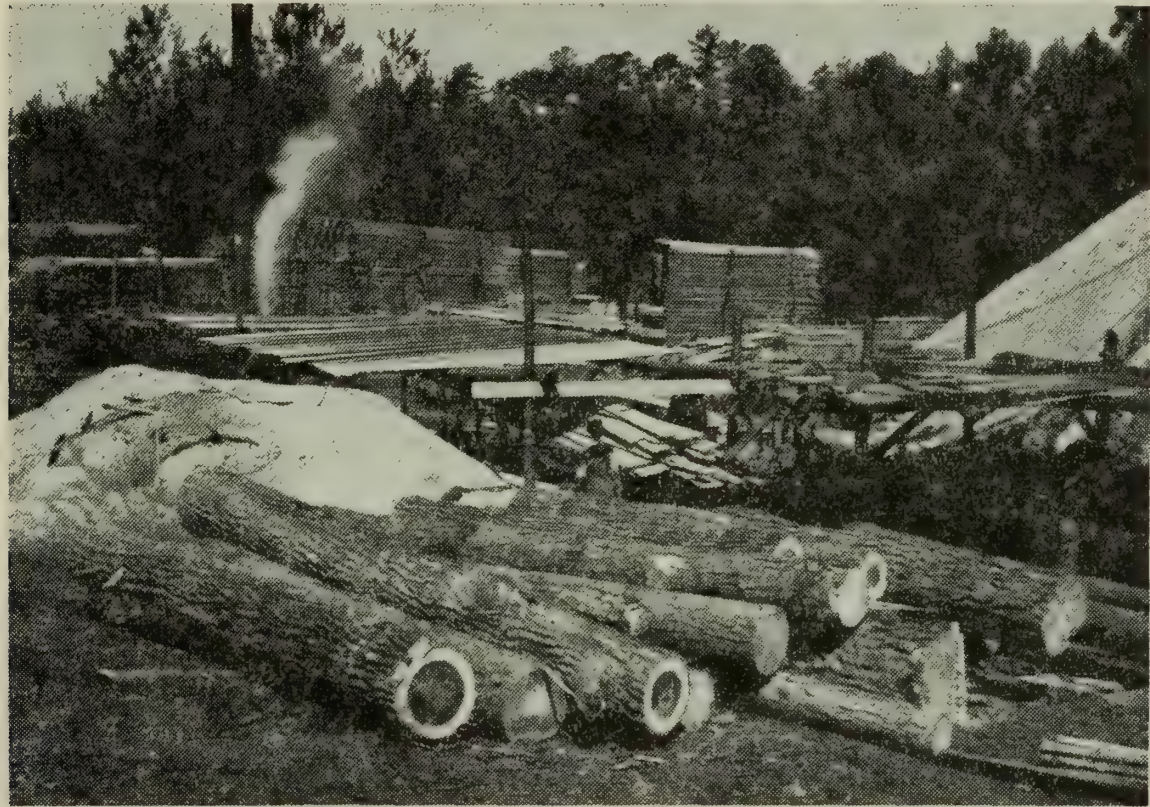
#### LUMBER AND PULPWOOD PRODUCTION BY YEARS

1942	-----	1,079,351 M bd. ft.	946,000 Cords
1943	-----	984,773 M bd. ft.	985,000 Cords
1944	-----	850,748 M bd. ft.	1,053,500 Cords
1945	-----	723,667 M bd. ft.	877,500 Cords
1946	-----	1,005,700 M bd. ft.	955,700 Cords
1947	-----	871,014 M bd. ft.	948,388 Cords
1948	-----	798,700 M bd. ft.	1,108,523 Cords
1949	-----	1,002,000 M bd. ft. est.	1,012,180 Cords
1950	-----	997,000 M bd. ft. est.	1,182,413 Cords
1951	-----	1,000,000 M bd. ft. est.	1,251,045 Cords
1952	-----	1,000,000 M bd. ft. est.	1,275,698 Cords
1953	-----	950,000 M bd. ft. est.	1,446,157 Cords

The production of sawtimber was not up to 1949-50 levels. The production of pulpwood, however, hit an all time high. For the first time pulpwood in substantial quantities was cut from the mountain counties of Oconee, Anderson, Pickens and Greenville. Some of the pulpwood companies opened wood yards in these counties. There is now a good pulpwood market in every county in the state. The movement of pulpwood from these upper Pied-

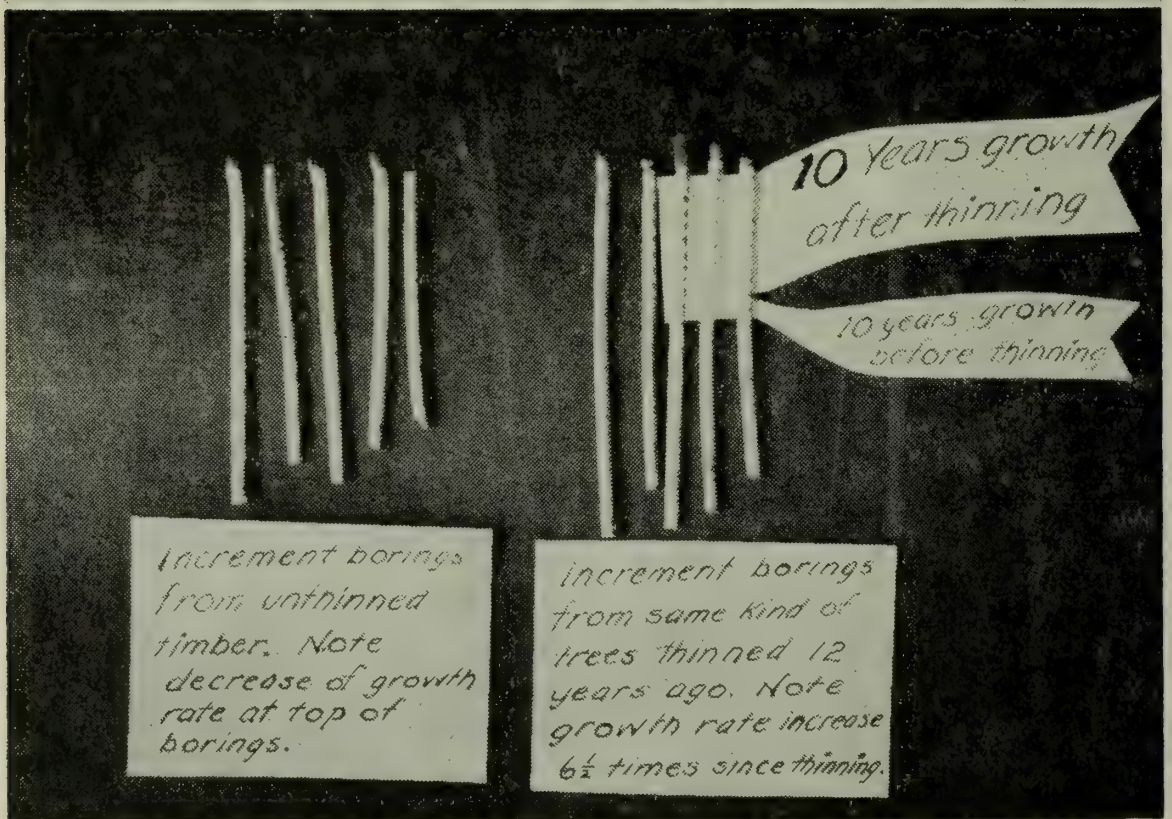
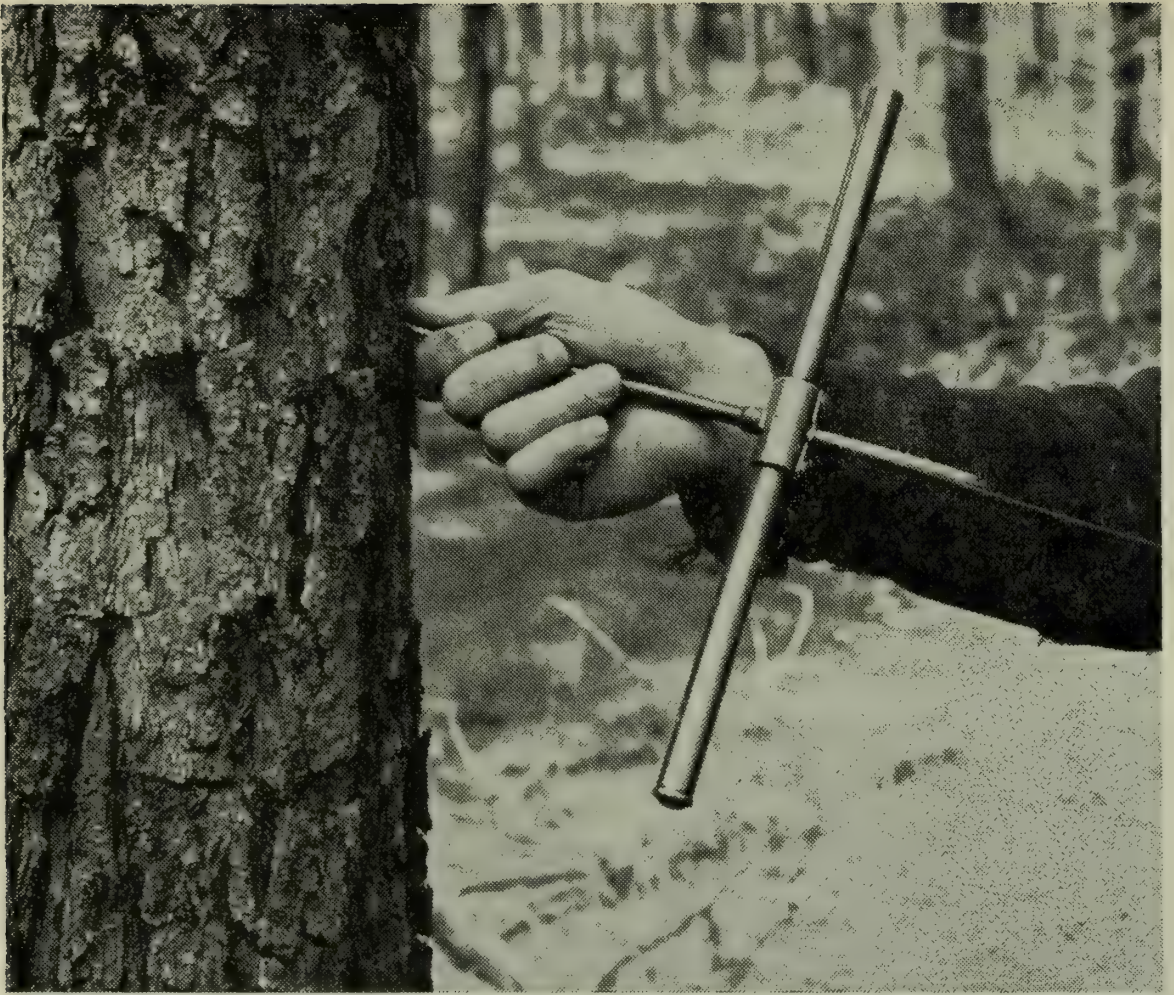


mont mountain counties is a healthy situation. The 1947 survey indicated the greatest in growth of 5 to 9 inches size trees in the Piedmont and mountain counties.



Lumber and pulpwood are the two leading products of South Carolina's forest products industry, the second largest industry in the state.





Tree rings tell the story. Foresters use an increment borer to check age and growth rate of standing trees. Tree rings in bottom photo show how proper thinning increases growth rate of a stand of trees.



The average size of logs being milled is continuing to decrease. The Forestry Commission's private landowner assistance program is designed to help grow larger and better quality sawtimber through selective cutting practices.

There were few new forest products industries that began operating in South Carolina during the year. Some of the smaller sawmill operators either shut down completely or only operated part-time since the demand for low-grade lumber products dropped off.

The forest industries that possess their own land in the state continued to show considerable interest in handling their company-owned woodlands properly. Many of the companies who do not hire full time foresters avail themselves of professional assistance by using part-time consultants, Commission or Extension foresters.

The pulp companies who obtain wood from South Carolina through their conservation departments continued to mark pulpwood for thinning on private property. According to reports received from these companies approximately one-third of the total cut of pulpwood in South Carolina is taken from thinnings and tops left from sawtimber operations. Approximately



A Commission forester and landowner examine low stumps left after selected trees were marked and cut for pulpwood in a thinning operation.



one-third of the remaining cut is from operations where minimum seed trees are left, leaving less than 40% of the pulpwood cut being taken from clear cutting operations.

Commission foresters answered approximately 500 requests to check trees for insects and disease. Also, a check was made by Southeastern Forest Experiment Station personnel for oak wilt and red gum blight. There was no oak wilt found in the state. There was considerable red gum blight found; however, the blight does not appear to have reached epidemic proportions. In fact, it appears to be most prevalent on the low-grade sweet gum growing on sites not suited for sweet gum.

No severe epidemic of insects or disease was noted in the state. There was a considerable buildup of certain species of pine beetles; however, losses from these insects were not sufficient to warrant control measures.

### REFORESTATION

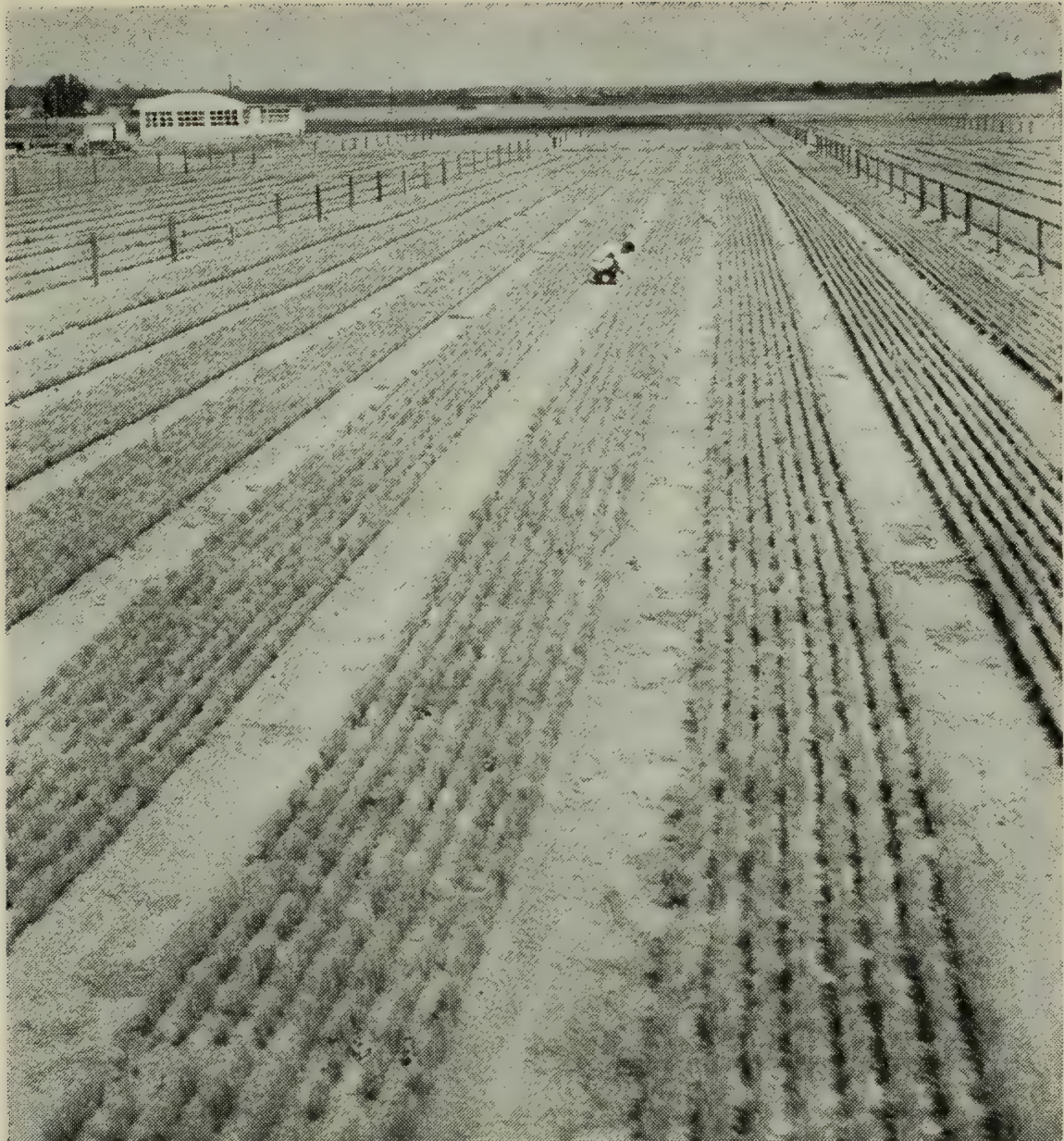
A total of 36,210,100 seedlings were distributed from the Horace L. Tilghman Nursery at Wedgfield. Distribution by species was as follows:

Loblolly Pine .....	18,531,750
Slash Pine .....	16,943,675
Longleaf Pine .....	490,625
Arizona Cypress .....	21,250
Red Cedar .....	65,750
White Pine .....	18,800
Yellow Poplar .....	41,250
Shortleaf Pine .....	97,000
<hr/>	
Total .....	36,210,100

An exchange was made with North Carolina, delivering 176,550 slash pine trees for the above listed White Pine, 18,800; Yellow Poplar, 41,250, Shortleaf Pine, 97,000, and 19,500 Red Cedar seedlings to supply a number of planters in the state who wanted these particular species.

The production of trees at the nursery this year was approximately 4,000,000 in excess of that planned. The nursery soil in the area planted to trees was in good shape organically and the treatment applied for the control of grubs was very successful,





More than 36 million seedlings, an all time record number, were produced during the year at the Commission's Horace L. Tilghman Forest Tree Nursery.

eliminating all losses from this source. Considerable work is being done this year towards maintaining a high organic content in the nursery soils and the Chlorodane treatment for the control of grubs is being continued.

This year no free tree seedlings were distributed from the nursery. Orders were received for the entire nursery stock however, prior to the end of the shipping season. 2,374 separate orders were received from landowners in the state for trees.

Tables 10 and 11 in the appendix show a record of seedlings distributed by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years:



1928-29	142,000
1929-30	148,000
1930-31	986,000
1931-32	976,000
1932-33	996,000
1933-34	1,031,000
1934-35	7,529,000
1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600
1947-48	11,356,990
1948-49	30,338,775
1949-50	29,501,955
1950-51	20,615,315
1951-52	16,619,000
1952-53	22,035,850
1953-54	36,210,100
<hr/>	
Total	309,912,458

This was the seventh year of nursery operation at the Wedge-field site. During this time the nursery has produced and distributed 173,172,485 seedlings at an average cost of \$2.74 per thousand. The average production for this seven year period was 24,746,069 trees annually. With the present facilities the nursery can maintain an annual production of 30,000,000 seedlings.

For the past two years moisture meters have been installed and read to determine the amount of available moisture in the nursery soils at all times. Careful weather records and watering records also have been kept so that correlation can be made between available moisture in the soil and the amount applied through





Approximately 12,000 bushels of cones are needed to meet the annual seed requirements at the nursery. Cones are collected in the fall and spread out in trays in cone drying barns at Sumter to dry. When the cones dry they open, releasing the seeds as shown in the bottom photo. Seeds are placed in cold storage until needed for planting in the spring.



watering or rain. These records should prove beneficial for future operations.

The collection of seed continues to be the major bottleneck to the production of trees. In order to produce approximately 30,000,000 trees for the 1954-55 planting season, it was necessary to plant all of the slash pine seed available and reduce the amount of loblolly pine seed on hand to only 1,843 pounds. This is by far the smallest carry-over of seed for the past seven years. Slash pine seed were unavailable for purchase from any source and we were able to collect only 1,342 bushels of cones. The loblolly cone crop was also very short and only 6,460 bushels of loblolly cones were collected. Approximately 12,000 bushels of cones should be collected each year to meet annual requirements.

In addition to the slash and loblolly, the major crops, 571 bushels of longleaf pine cones were collected, 225 pounds of red cedar fruit and 60 pounds of arizona cypress seed purchased.

Considerable work was done to improve the facilities for handling cones and extracting seed so that if cones are available, larger quantities can be handled and the amount of seed on hand built up so that the carry-over of seed can be increased to at least one year's supply.

## COOPERATIVE FOREST MANAGEMENT

During the fiscal year nine cooperative forest management projects were operated in the state. A summary of work accomplished by C. F. M. Foresters is included with the data for each district.

## STATE FORESTS

The amount of state forest land remained the same as last year. The state forests locations and acreages are shown below:

1. Cassatt State Forest.....	462 acres
2. Harbison State Forest.....	2,202 acres
3. Manchester State Forest.....	28,830 acres
4. Sand Hills State Forest.....	92,000 acres

Prior to acquisition by the state most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed towards building up the growing stock in existing forest stands



and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective is the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops in order to reduce the competition so that pine will survive and grow. Approximately 2,000 acres of scrub oak lands have been cleared and replanted to pine through fiscal year 1953-54.

Detailed reports of activities on each of the State Forests follow:

### **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres composed primarily of scrub oak land and abandoned fields. 34,000 slash pine seedlings were planted in abandoned fields. This completes the planting in all abandoned fields. Future plans include the clearing of the remaining scrub oak lands on the forest and planting to pine.

Personnel from the Sand Hills State Forest did the tree planting and also maintained boundary firebreaks on the Cassatt State Forest.

### **HARBISON STATE FOREST**

Harbison State Forest, containing 2,202 acres, is located in Richland County. One sawtimber sale followed by a pulpwood



Harbison State Forest is one of the five state forests operated by the S. C. State Commission of Forestry.



operation was made from the property in 1953-54. 160,196 board feet were marked and sold for \$4,573.59. Also, 142 cords of pulpwood were sold, making the total income from the forest \$5,142.27.

The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the Caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year. Approximately seven miles of firebreaks were maintained by Manchester State Forest personnel and equipment.

### MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest is located south of Wedgefield in Sumter County. This land is leased to the S. C. State Commission of Forestry on a long term lease from the Federal Government.

More than one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak and reclaiming it for pine production.

#### Fire Protection:

Only 18 fires occurred which burned 81.5 acres during the year. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining the area in the prevention, presuppression and suppression of forest fires. This fire record is one of the best ever posted for Manchester State Forest.

Approximately 210 miles of firebreaks were maintained during the year.

#### Recreation:

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. A detailed report on these two camps will be found in the Parks Division section of this report.



**Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

**Agriculture:**

Forty-six tenants rented 1,526.5 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the forest. Others assist when needed in the prevention and suppression of forest fires.

**Road and Truck Trails:**

During the year 11 miles of truck trails were machined and washes filled, a number of bridges repaired and diversion ditches cleaned.

**Management Plan:**

The Management Plan and Stand Description Maps made for this forest in 1947 have been revised and brought up-to-date. Plans are almost complete for the periodic thinning of planted pine stands that are now approaching pulpwood size. Thinning these planted stands for pulpwood was started in 1953-54. Saw timber sales will be made from areas where the timber is reaching maturity.

**Tree Planting:**

A total of 486,000 trees were planted on the forest during the year. These included 465,000 slash pine, 11,000 loblolly pine and 10,000 longleaf pine. Of the above, 200 acres were machine planted in the brush-cut area, 50 acres machine planted in old fields and 236 acres were re-planted with dibbles.



Tree planting machines are used to plant idle acres.

#### Forest Products Sold:

Forest products sold during the year included the following:

Pulpwood (cords)_____	2,083
Posts (pieces)_____	200

#### Telephone Lines:

Six miles of telephone lines in the forest system were brushed and maintained during the year. A number of breaks were repaired and general maintenance carried out to keep the telephone system in good working order.

#### Silvicultural Practices:

The primary silvicultural activity was the reclaiming of scrub oak areas. 350 acres in Compartments 5 and 6 were cleared of scrub oak and plowed with the Athens disc plow. Results from this treatment appear to be satisfactory and economically sound. A more detailed description of this work can be found in the annual report submitted by Manchester State Forest Director.



41 acres of young pine plantations were released by removing the scrub oak overstory with bush axes. During the year the scrub oak on 84 acres of young pine plantations was poisoned with Ammate and 77 acres poisoned with 2, 4, 5-T.

Data on other experiments already underway are being kept which include thinning experiments in young pine stands, prescribe burning treatments, and elimination of undesirable hardwood.

### **Maintenance and Repair:**

A large number of small maintenance jobs were completed on tenant houses and headquarters buildings. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair.

Considerable repair work was completed on the automotive and tractor equipment. A TD-9 tractor was purchased new in July 1953. At least one large truck and one pickup should be traded within the next year.

### **Shaw Air Force Base Lease:**

The U. S. Army Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until June 30, 1962. The State Forestry Commission will be paid \$3,074 per year for this lease.

## **SAND HILLS STATE FOREST**

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease agreement.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities for several years to come should consist of tree plant-

ing, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. More than half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultured objective at present.



Signs along US 1 and other highways mark the boundaries of Sand Hills State Forest.

### Tree Planting:

During the year only 686,000 slash pine seedlings were planted. 621,000 of these trees were planted in areas cleared of scrub oak, 40,000 in a burned area, and 25,000 in experimental plots.

### Forest Products Harvested:

The following products were harvested from the Sand Hills State Forest during the year:

Sawtimber	348,841 bd. ft.
Pulpwood	1,595 cords
Poles	89

### Fire Protection:

During the year 17 fires burned only 107 acres. This is the best fire record since the forest was established in 1939. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This



plan coordinated the activities of the Chesterfield Unit Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, presuppression and suppression of forest fires.

A total of 180 miles of firebreaks were plowed on the forest.

### **Recreation:**

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees are also held there. The lake is open to fishing but no swimming is allowed.

The Parks Division continued improvement work on Campbell's Pond, Negro State Park. This area received heavy use during the year. A more detailed report will be found in the Park Section of this report.

### **Fish and Wildlife:**

No hunting was allowed on the area during the year. Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

### **Agricultural Lands:**

20 tenants rent and farm 1,200 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

During the past three years more than 500 acres of land have been rented to watermelon growers following the clearing of scrub oak from the area. Present plans are to continue to clear scrub oak lands and rent them one year to watermelon growers and then plant them to pine.

**Roads and Truck Trails:**

During the year 55 miles of truck trails were graded, brushed out, and washes filled in. 10 culverts were repaired and four timber bridges redecked. 20 diversion ditches were cleaned out.

**Silvicultural Practices:**

A total of 135 acres of scrub oak was cleared with the brush cutter and plowed with the Athens Plow.

A number of experimental plots have been established using various poisons and concentrations in an effort to determine the most practical method of eliminating scrub oak competition so that pine can become established.

Records were maintained on thinning plots established in 1950.

**Maintenance and Repair:**

The Sugar Loaf Mountain Recreation Area was maintained and all facilities in the area are in very good condition. The general condition of headquarters and director's residence is good, however, a number of the tenant houses are in need of considerable maintenance work. All of the buildings at Forest headquarters and the director's residence area were painted except the director's residence.

**Boundary Surveying:**

A Cadastral Engineer was sent by the Atlanta Office of U. S. Fish & Wildlife Service to continue work on boundary surveys for the forest and surveyed one tract; however, there are many more miles yet to be run to completely establish our boundaries. This surveying was done on an area where there was some dispute about the location of the Sand Hills State Forest lines.

**Experimental Studies:**

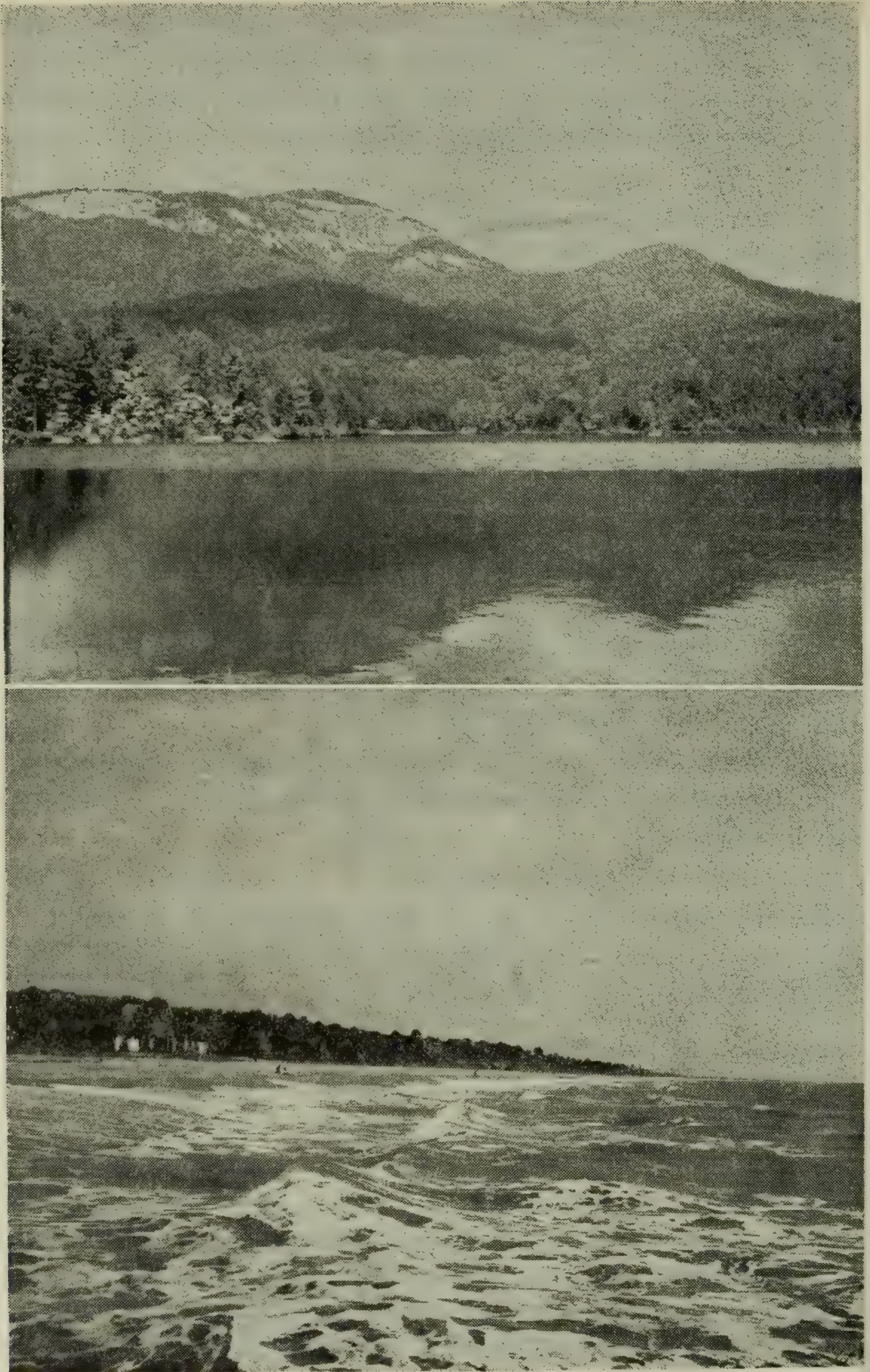
In cooperation with the Santee Branch, Southeastern Forest Experiment Station, several experimental studies have been set up aiming toward the development of nursery and planting practices needed to insure survival and early growth of planted long-leaf pine in the scrub oak areas of the Sand Hill Regions of the state. This work is being done on both the Sand Hills State Forest and the Manchester State Forest.



The studies include:

1. Tests of nursery treatments involving fertilizer, seedling stand density, and root pruning for development of drought-hardy longleaf pine seedlings.
2. Effect of seedling grade, seedling treatment and season of planting upon early survival of longleaf pine.
3. In typical planting localities tests of longleaf pine stock from local seed sources as to survival, growth rate and other characteristics which may effect suitability for planting.
4. Determination of the effect of various degrees or treatment of scrub oak cover on soil moisture and longleaf pine survival.
5. Tests by seedling grades the effect of root length upon survival of longleaf pine.
6. Comparison of older longleaf pine seedling stock (2-0), transplant stock (1-1), and regular planting stock (1-0) as to survival and early growth.
7. Tests of the effect of season of application in chemical treatments to control scrub oak in longleaf pine planting sites.





State parks distributed from the mountains to the sea, offer wholesome outdoor recreation amid peaceful natural surroundings. There is at least one state park within an hour's drive from any place in South Carolina.



## STATE PARKS

Of outstanding significance this fiscal year was the passage of enabling Legislation by the General Assembly whereby the Division of State Parks could acquire funds through a loan or bond issue to finance capital improvements in the several parks and use the revenue receipts from the operations of the state parks to retire the indebtedness.

Not since the late 1930's, when the State Park System was being developed through the use of personnel of many CCC camps placed on the state areas, has so much construction been planned.

With the availability of \$300,000 for permanent improvements, those parks still in an incomplete state with the outbreak of World War II, will receive for the first time facilities to more nearly round out their service. Other newly acquired areas will immediately begin their development according to plan.

The attendance at the state parks again surpassed the 3-million mark, for the third straight year. This is a greater visitor load than reported by any other southeastern state, and while highly complimentary to South Carolina's system, places a strain on facilities designed for one-half this number. Liberal appropriations are needed for the continuing repair and maintenance of these existing facilities. The new capital improvements program will tend to more adequately take care of the visitor load with added facilities in a number of parks for the 1955 season.

### **Appropriations:**

The total appropriation for the Division of State Parks for operations was \$359,692. Earmarked funds in the amount of \$41,400 for capital improvements at Andrew Jackson Historical State Park and Pleasant Ridge Negro State Park enabled construction to be started at these two new parks. A contribution from Greenwood County of \$12,370, from sale of timber on an area formerly included in the State Park and deeded back to the County, financed the development of the new Negro Area at Greenwood State Park.

The operating budget saw the inclusion of \$63,750 for "B-4 Repairs and Maintenance" which was an increase over former years and permitted extensive repairs during the winter of facilities long neglected.

## State Park Areas:

The twenty-two State Parks, with their acreage, location, date established or acquired, and date opened to visitors, are shown below:

Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	867	Aiken .....	July 1934	Aug. 1936
Andrew Jackson Historical..	360	Lancaster .....	April 1953	Under Construction
Barnwell .....	252	Barnwell .....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield .....	March 1934	July 1939
Chester .....	523	Chester .....	May 1935	July 1939
Croft .....	7,135	Spartanburg .....	May 1949	June 1949
Edisto .....	1,255	Charleston .....	Feb. 1935	June 1937
Givhans Ferry.....	1,235	Dorchester-Colleton .....	Oct. 1934	June 1937
Greenwood .....	1,114	Greenwood .....	April 1938	July 1940
Hunting Island.....	5,000	Beaufort .....	July 1938	June 1941
Kings Mountain.....	6,141	York-Cherokee .....	Nov. 1934	June 1940
Lee .....	2,839	Lee .....	June 1935	June 1941
Little Pee Dee.....	835	Dillon .....	June 1951	Under Construction
Myrtle Beach.....	312	Horry .....	Aug. 1934	July 1936
Oconee .....	1,165	Oconee .....	July 1935	June 1937
Paris Mountain.....	1,275	Greenville .....	April 1935	June 1937
Pleasant Ridge.....	300	Greenville .....	Sept. 1950	Under Construction
Poinsett .....	1,000	Sumter .....	Aug. 1934	Aug. 1936
Rivers Bridge.....	390	Bamberg .....	May 1945	July 1945
Santee .....	2,364	Orangeburg .....	Jan. 1942	June 1949
Sesqui-Centennial .....	1,500	Richland .....	Aug. 1937	June 1940
Table Rock.....	2,860	Pickens .....	May 1935	June 1940
	46,083			

The Commission of Forestry also administers one wayside park and seven historical areas:

Colleton Wayside, Colleton County  
 Eutaw Springs, Orangeburg County  
 Ft. Watson, Clarendon County  
 Thomas Sumter Burial Site, Sumter County

Burial places of:

Gen. Francis Marion, Berkeley County  
 Col. Isaac Hayne, Colleton County  
 Thomas Heyward, Jasper County  
 Gen. Andrew Pickens, Pickens County

## Vacation Facilities—Family Cabins:

The availability of 58 cabins provide vacation opportunities for nearly a thousand families. These facilities have been in such demand as to disappoint about one-half of those seeking reservations. The construction of additional cabins primarily at the seaside parks, will tend to improve this condition and make available many more vacation weeks.





State park family vacation cabins are much in demand each year.

### Group Camps

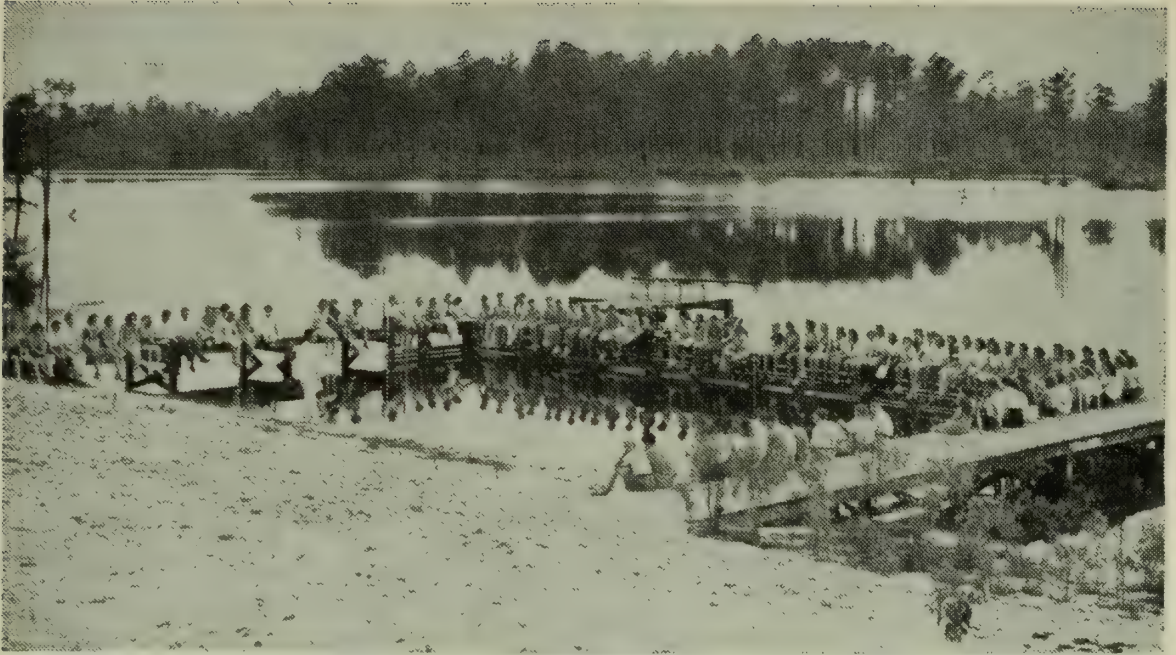
Seven group camps—six for white and one for Negro campers—located at four state parks, Paris Mountain, Cheraw, Kings Mountain and Poinsett, continue to supply the facilities for several hundred children seeking out-of-doors adventure. With a daily capacity of 550 campers and about 13 weeks in the summer season, some 38,000 camper days are counted at the seven areas. Church and school groups, Boy and Girl Scouts, YMCA and YWCA's make up the greater portion of the use agencies.

### Historical Areas:

The Division of State Parks is charged by the Legislature to maintain seven historical areas within the State and receives a special appropriation for this purpose.

The Fort Watson Memorial, an Indian Mound in Clarendon County; the General Thomas Sumter burial area in Sumter County; and the Eutaw Springs Historical Site in Orangeburg





Waterfront at one of the seven group camps in the state parks which provide facilities for church groups, school groups, scouts, and other organized groups to enjoy camping programs.

County, were deeded to the Commission of Forestry and a definite program of maintenance is in operation.

The burial places of General Francis Marion at old Bell Isle Plantation in Berkeley County, of Col. Isaac Hayne in Colleton County, and of Thomas Heyward in Jasper County are in private ownership and receive clean-up attention from the Commission.

General Andrew Pickens is buried in the Old Stone Churchyard at Clemson and his grave is also administered by the Commission.

### **Recommendations:**

To the 1955 Legislature we respectfully make the following recommendations:

1. Make available an adequate budget for the increased operation of 22 State Parks, and to include especially items:

- (a) sufficient to offset depreciation of buildings, installations and equipment;
- (b) to supplement the number of personnel at four state parks; and
- (c) to provide pay increases to certain labor and summer personnel, not considered in the 8-1/3 per cent general increase two years ago.



2. While it has been repeatedly stated that the areas comprising the State Park system are generally adequate to serve the people of South Carolina, the following are exceptions to this generalization:

- (a) Two additional state parks for use by Negroes are urgently needed—one in the Charleston area and another in the vicinity of Columbia.
- (b) Next in order for a state park for whites should be the area centering around Williamsburg County.
- (c) The development of the two acquired areas on the Clarks Hill Reservoir, Baker Creek for whites and Hickory Knob State Park for Negroes, should follow in a third priority position.

## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Negro Areas
AIKEN STATE PARK Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x		
†ANDREW JACKSON HISTORICAL STATE PARK Lancaster, S. C., RFD.....																	
BARNWELL STATE PARK Blackville, S. C.....	x	x	x	x	x	x	x				x		x		x		
CHERAW STATE PARK Cheraw, S. C.....	x	x	x	x	x	x	x	x			x		x	x	x	x	x
CHESTER STATE PARK Chester, S. C.....	x	x				x	x				x				x		
CROFT STATE PARK Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x		
EDISTO BEACH STATE PARK Edisto Island, S. C.....	x	x	x	x	x	x	x	x					x		x		
GIVHANS FERRY STATE PARK Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x		
GREENWOOD STATE PARK Ninety Six, S. C., RFD.....	x	x				x	x						x		x		x
HUNTING ISLAND STATE PARK Frogmore, S. C.....	x	x		x	x	x	x						x		x		x
KINGS MOUNTAIN STATE PARK Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x	
LEE STATE PARK Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x		
LITTLE PEE DEE STATE PARK Dillon, S. C.....	x	x															
MYRTLE BEACH STATE PARK Myrtle Beach, S. C.....	x	x		x	x		x	x		x	x		x		x		
OCONEE STATE PARK Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x	x	x		
PARIS MOUNTAIN STATE PARK Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x	
PLEASANT RIDGE STATE PARK (For Negroes) Cleveland, S. C.....	x	x		x	x			x									x
POINSETT STATE PARK Wedgefield, S. C.....	x	x	x	x	x	x	x	x				x	x		x	x	x
RIVERS BRIDGE CONFEDERATE MEMORIAL STATE PARK Ehrhardt, S. C., RFD.....	x	x		x	x	x	x						x		x		
SANTEE STATE PARK Elloree, S. C., RFD.....	x	x		x	x	x	x						x		x		
SESQUI-CENTENNIAL STATE PARK COLUMBIA, S. C., RFD.....	x	x		x	x	x	x						x		x		
TABLE ROCK STATE PARK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x		

Note: For overnight CAMPING, write in advance to Park Superintendent.

\* Where no regular Barbecue Pit and shelter are established temporary arrangements can be made at all Parks.

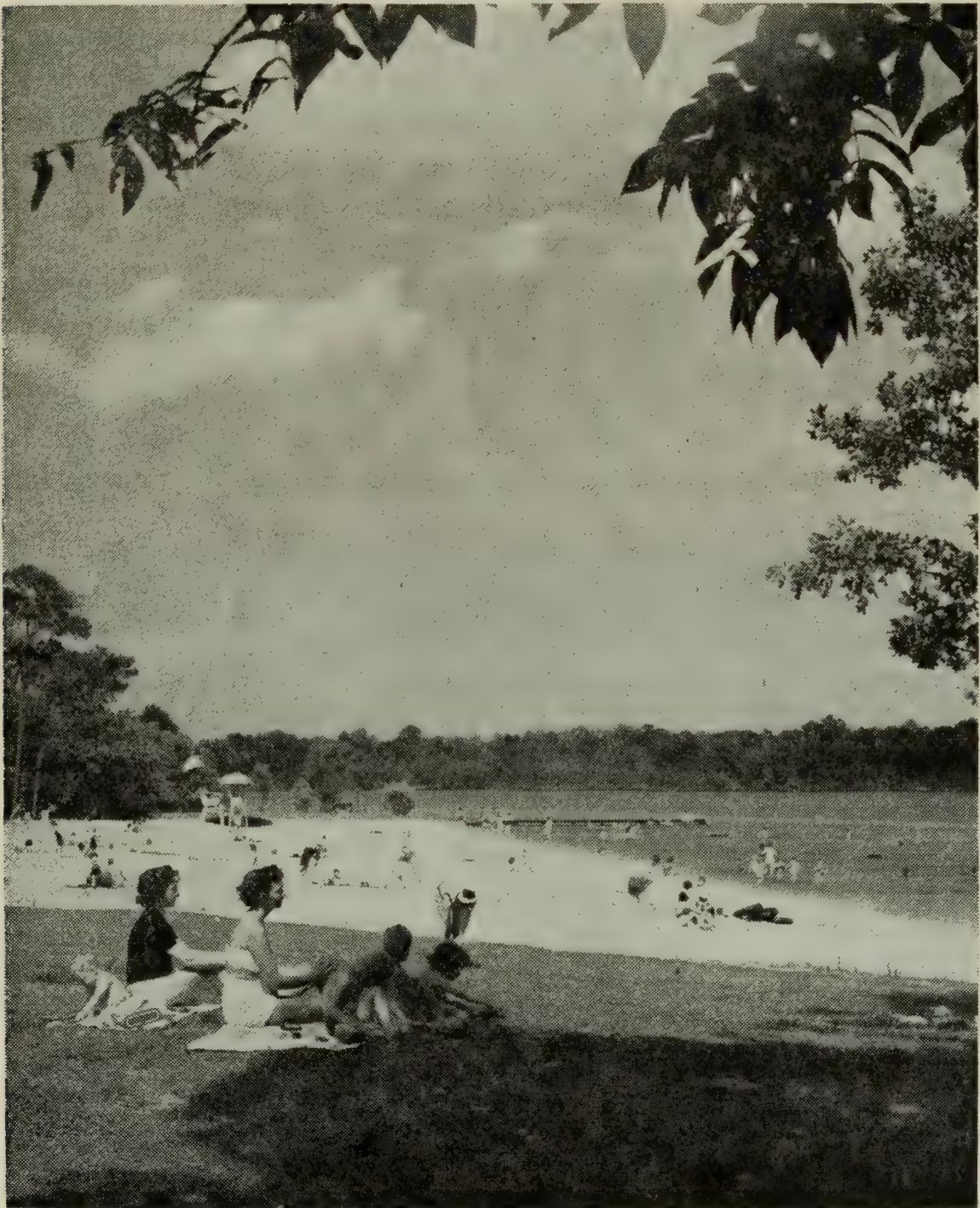
† Construction underway.



### THE STATE PARK SYSTEM

In March 1934 a tract of some 700 acres of land near Cheraw in Chesterfield County was deeded to the S. C. State Commission of Forestry for development as a state park. Thus was born the South Carolina State Park system. From this beginning 20 years ago of one park and 700 acres had grown 22 parks embracing more than 46,000 acres.

Below is recorded pertinent facts concerning the areas presently comprising the state system of parks.



View of the beach at Cheraw State Park—the first area acquired in South Carolina 20 years ago for development as a state park.



**AIKEN STATE PARK:** 867 acres, 18 miles east of Aiken on SC Highway No. 215, 1 mile south of intersection.

This park has the double advantage of a river with boats, cabins for fishermen and a spring-fed lake of crystal-clear water for all visitors.

Historically, the park is on land made famous through many periods of the state's development. Indians, Spanish explorers, Whig and Tory battles, and fighting in the War Between the States all played a part in the history of this section.

**ANDREW JACKSON HISTORICAL STATE PARK:** 360 acres, 10 miles north of Lancaster on US Highway 521. Park under construction. Plans for a suitable memorial at the birth-place of President Andrew Jackson, also featuring the history of the Waxhaw Indians and the pioneer country from 1750 to 1850. Museum-residence nearing completion.

**BARNWELL STATE PARK:** 252 acres, 3 miles south of Blackville on SC Highway No. 3.

This park is beautifully located in the center of thickly settled agricultural communities and is the mecca for many family gatherings. A picturesque little lake invites boating and swim-



Many groups use the facilities of the community building at Barnwell State Park each year.



ming. Half-a-dozen sizeable towns are within twenty minutes of the park.

**CHERAW STATE PARK:** 7,361 acres, 4 miles southwest of Cheraw on US Highways Nos. 1 and 52.

This largest and oldest of all state parks is a good example of developing sub-marginal sandhill country into a place that people can use and enjoy.

Every recreational facility, including a day-use area and two group camps are available.

There is an area for Negroes at Campbell's pond on the Sand Hills State Forest which adjoins the park.

**CHESTER STATE PARK:** 523 acres, 3 miles southwest of Chester, on South Carolina Highway No. 72.

Wooded hills and rolling land offer, especially to the surrounding industrial communities, a convenient and restful resort. Boats are available for sport on the 160-acre lake. Picnicking is a favorite pastime. An excellent community lodge overlooks the lake. This area shows how depleted land can be reforested and made beautiful once more.

**CROFT STATE PARK:** 7,088 acres, a portion of Camp Croft lying between South Carolina Highway No. 56 and US Highway No. 176 east of Spartanburg.

Swimming and picnicking are the main attractions at Croft State Park. The land is beautifully forested and is traversed by many creeks. The rolling Piedmont countryside affords many lovely scenic features. This park is being developed.

**EDISTO BEACH STATE PARK:** 1,255 acres, 20 miles southeast of Adams Run on SC Highway No. 174, on Edisto Island.

For recreational, historical and scientific interests, Edisto Beach State Park is unsurpassed.

Tall palmettos rise majestically above the semi-tropical undergrowth and march down to the ocean's edge. Bones of prehistoric elephants, hoofs of horses that had three toes, pieces of Indian pottery and parts of old Spanish guns have all been found on Edisto.

**GIVHAN'S FERRY STATE PARK:** 1,235 acres, 7 miles west of Summerville, on US Highway Alternate 17, then north on SC Highway No. 61 for 7 miles.

This park provides facilities for picnicking, swimming and community gatherings but it is mainly famous for its fishing. The old Charles Town-Savannah Town-Augusta Indian path forded the Edisto river here before its use as a ferry. In olden days Indian braves would dive off the high bluffs into the river for small gifts.

**GREENWOOD STATE PARK:** 1,114 acres, 5 miles east of Ninety Six on SC Highway No. 34.

This park is on the shore of Greenwood Lake. The broad expanse of water and the irregular shore line help make Greenwood State Park a place of beauty. Picnic areas, playfields, and the boat basin are heavily used by the people of the thickly settled industrial and farming country that surrounds the park. The facilities include an area for Negroes.

**HUNTING ISLAND STATE PARK:** 5,000 acres, 16 miles southeast of Beaufort at the terminus of US 21.

This barrier island possesses unusual wild beauty in its virgin growth of pine and hardwood in a semi-tropical setting.

A lighthouse, 136 feet high, is one of the attractions to visitors. Its observation platform affords a magnificent view of the historic sea islands up and down the coast.

This is the only part of South Carolina which has been governed under six flags; Spanish, French, English, the State of South Carolina during the Revolutionary War, the United States, and the Confederate States. Spaniards, Frenchmen, Negro slaves, American colonials, pirates, Confederates and Northerners have all lived, fought and died hereabouts.

Nowadays, Hunting Island is a lovely, quiet refuge where many people come for rest and recreation.

**KINGS MOUNTAIN STATE PARK:** 6,141 acres, 12 miles north of York on SC Highway No. 161.

This area is widely known historically. The battle of Kings Mountain was fought nearby. This battle is sometimes called "The Battle of the Colonels" because neither American nor British officers engaged held rank higher than colonel.

All is not history at the park. Spring comes late and the woods blossom with dogwood and the red bud, with yellow jessamine, and later, the cowslip, the wild azalea, violets of many kinds, and woodbine. In May the mountain laurel blooms, and until



winter comes there are always many flowering plants among the oaks, pines, poplars and cedars.

Many visitors come from all over the state to enjoy the scenic, recreational and historical advantages offered by Kings Mountain State Park.

**LEE STATE PARK:** 2,839 acres, 6 miles northeast from Bishopville via US Highway No. 15 and SC Highway No. 156.



**Picturesque flowing wells are one of the features of interest at Lee State Park.**

Swimming, picnicking and fishing are the chief attractions for visitors to Lee State Park, on the banks of Lynches River. Winding roads and wooded trails enable visitors to enjoy the beauties of dense swamp growth. The quality of the clay on the banks of the river has been noted since Indian days. Among historical incidents which occurred in the vicinity of this park were numerous duels, the most famous of which was the Cash-Shannon affair in 1880. Lovely flowing wells add touches of beauty and interest.





Many visitors enjoyed the Myrtle Beach State Park Fishing Pier during the year.

**LITTLE PEE DEE STATE PARK:** 835 acres, 10 miles south and east of Dillon, via SC Highway 9 and county road. Park under construction. Picnicking, camping and fishing now available. Lake nearing completion.

**MYRTLE BEACH STATE PARK:** 320 acres, 3 miles south of Myrtle Beach on US Highway No. 17.

This park has a mile of ocean frontage on one of the widest and smoothest beaches along the Atlantic coast.

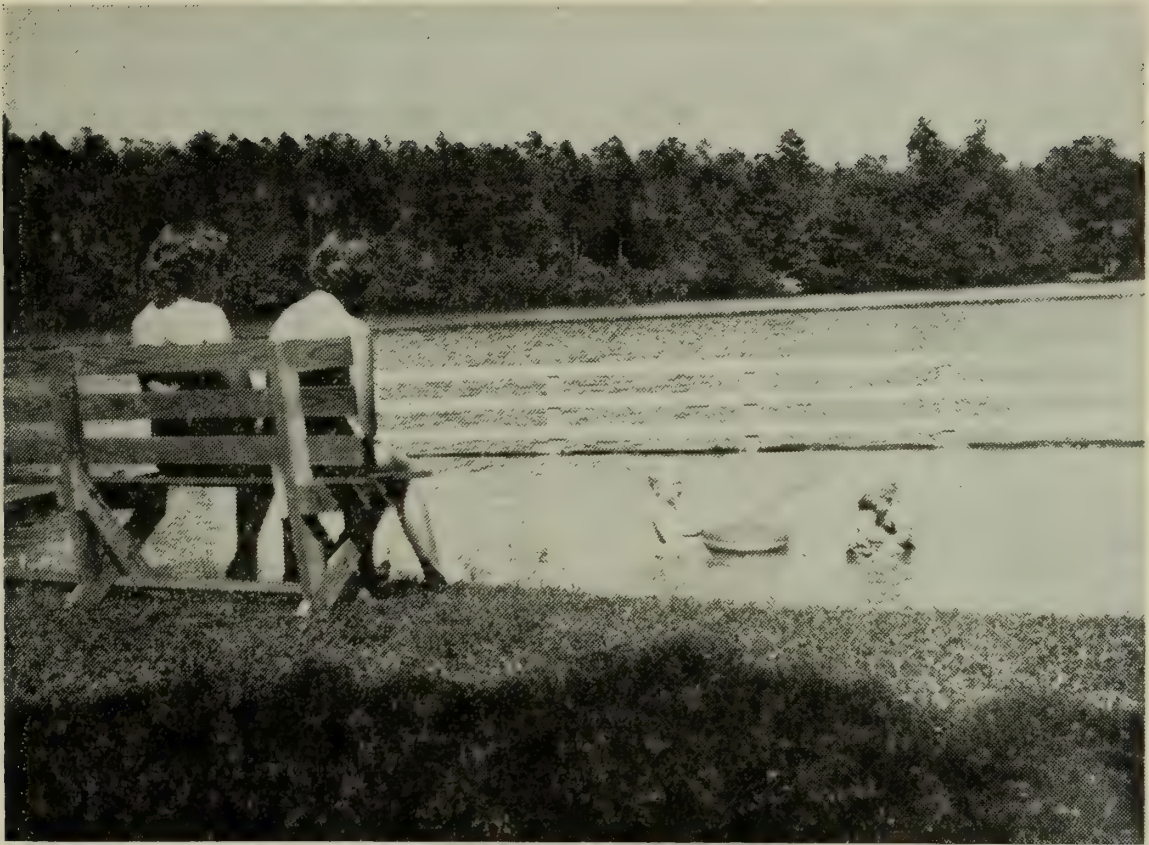
Winding roadways lead through the woods where cedar, oak, dogwood and many other trees are draped with Spanish moss and where azaleas, violets and lilies look up from the leaf-strewn roadside.

**OCONEE STATE PARK:** 1,165 acres, 8 miles northwest of Walhalla on SC Highway No. 28, then 2 miles east on SC Highway No. 107.

This restful retreat on a high plateau between Station Mountain and Stump House Mountain is oftentimes called the "Family Park". The refreshing mountain air and the cool water along with many man made facilities help make Oconee State Park a good place to go to spend a day or a week.

**PARIS MOUNTAIN STATE PARK:** 1,275 acres, 7 miles north of Greenville via US Highway No. 25 and county road.





Picnicking and swimming are the two most popular activities at Oconee and other state parks.



This park serves the people of the largest textile center in the state. Thousands of city-weary and factory-tired people flock to the cool woods and lakes of Paris Mountain. Picnicking goes on well past summer, and winter nights are lighted by camp and cooking fires.

The park gets its name from Richard Pearis, the first white settler in this area. Pearis owned all the land on which the city of Greenville was built, and many acres besides. Pearis because a Tory officer during the Revolutionary War and later was exiled to a West Indian Island. Now, of all the localities where Richard Pearis lived, Paris Mountain alone bears his name, though with a different spelling.



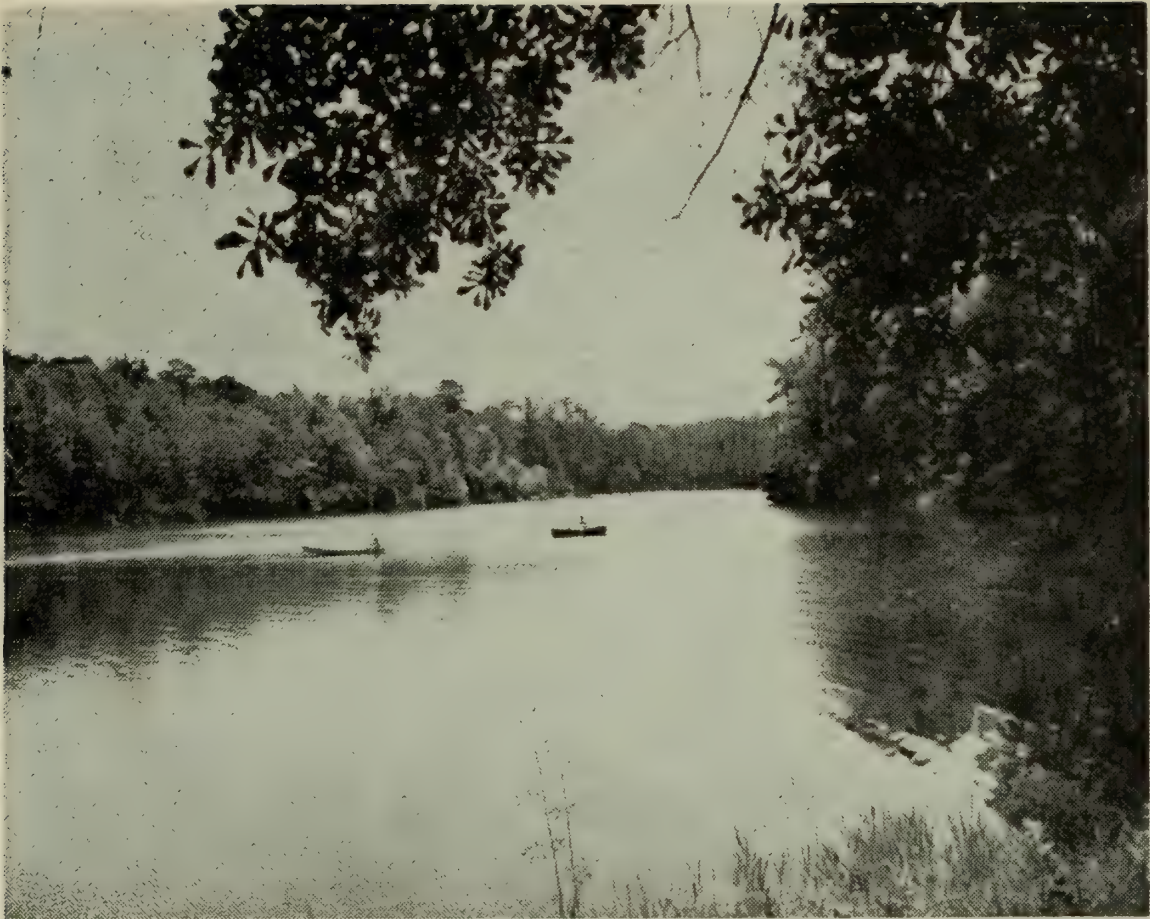
One of the facilities added to Pleasant Ridge Negro State Park during the year was a new bathhouse.

**PLEASANT RIDGE NEGRO STATE PARK:** 300 acres, 20 miles north of Greenville via US Highways 25 or 276 and SC Highway 11. Park under construction. Picnicking, camping and swimming now available; vacation cabins nearing completion. Wooded mountainous area served by splendid paved road.

**POINSETT STATE PARK:** 1,000 acres, 8 miles south of Wedgefield on SC Highway No. 261.

Mountain laurel, galax and numerous hill flowers beautify these "high hills of Santee" while close by great trees rise above the dense growth of Wateree Swamp.





Boating and fishing are popular at Poinsett and other state parks.

The hilly terrain of the park is unusual in that generally the land hereabouts is flat.

The park is named for Joel Poinsett, naturalist, traveler, statesman, and educator who was born in South Carolina. The poinsettia was introduced by him from Mexico and is named for him.

The combination of mountain and swamp vegetation along with ancient marine deposits, makes Poinsett extremely interesting to nature lovers and students.

At Mill Creek, on adjoining Poinsett State Park, there is an area for Negroes.

**RIVERS BRIDGE CONFEDERATE MEMORIAL STATE PARK:** 390 acres, 7 miles east of Sycamore on SC Highway No. 641.

This park is of considerable historic importance. It marks the site of the Salkehatchie River crossing by Union troops. Here, a handful of Confederate soldiers fought a delaying action against Sherman during his march to the sea.





A large, modern swimming pool, plus a kiddies spray pool attract many visitors to Rivers Bridge Confederate Memorial State Park.

Picnicking, the park museum, and an annual memorial service attract many visitors to Rivers Bridge.

**SANTEE STATE PARK:** 2,364 acres, 5 miles south of Parler on SC Highway No. 6.

This park is being developed on the shores of huge Lake Marion of the Santee-Cooper impoundment and plans call for gradual expansion of the facilities until someday the park will be a fine place for all who seek rest and recreation.

**SESQUI-CENTENNIAL STATE PARK:** 1,500 acres, 13 miles northeast of Columbia on US Highway No. 1.

In 1936 Columbia celebrated its 150th anniversary and money obtained from the sale of Sesqui-Centennial coins purchased the land for the park. Picnicking, swimming and boating attract thousands of visitors to this park annually.

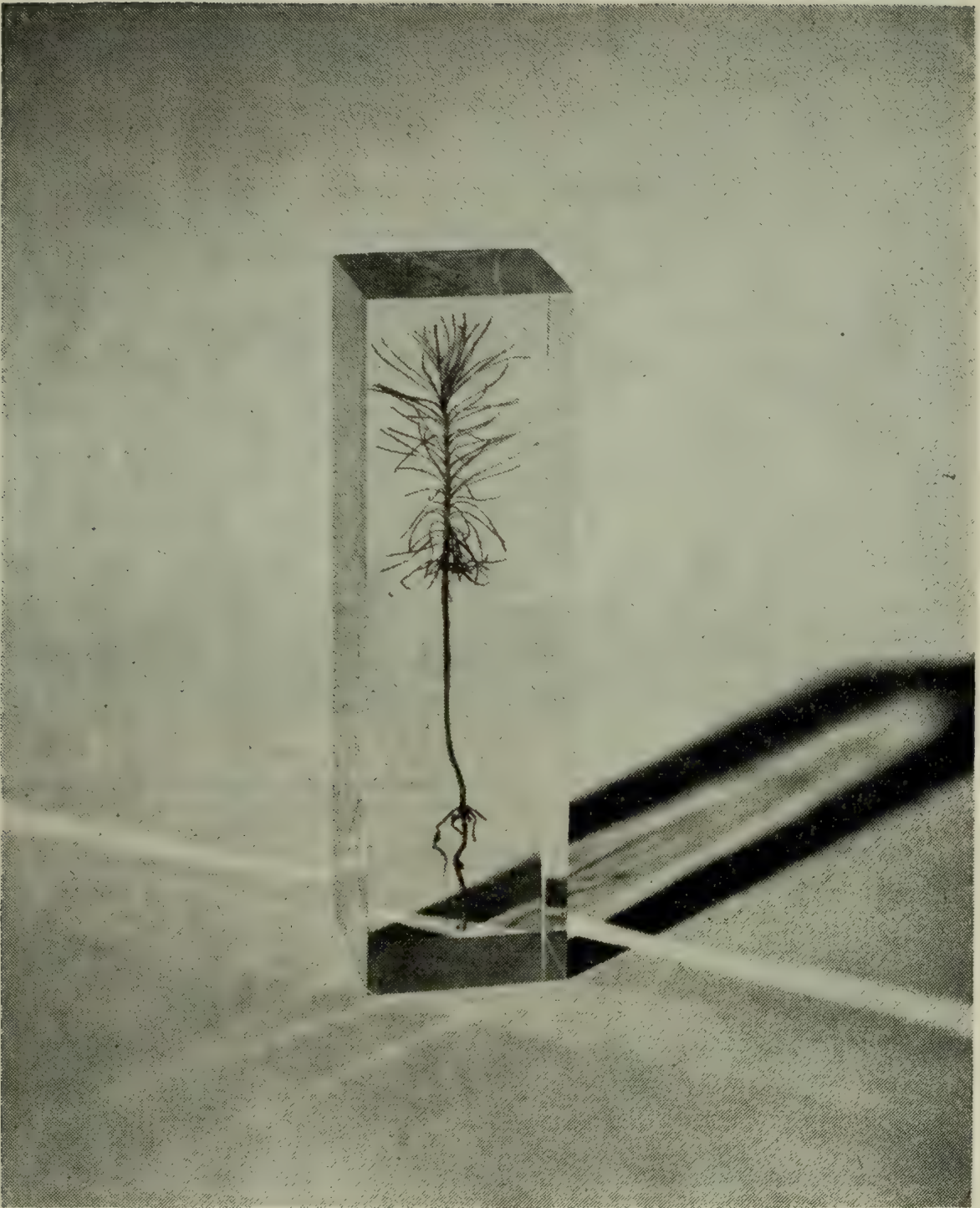
**TABLE ROCK STATE PARK:** 2,860 acres, 16 miles north of Pickens via US Highway No. 178, SC Highways No. 288 and 25.



Three high-curved peaks, with bare rock breaking gray through a covering of green form a background for spectacular Table Rock State Park. For more than a hundred years it has been famous for its beauty. Legend has it, that a gigantic Indian chieftain dined at the table, thousands of feet above ordinary mortals.

The park is not only a recreation center, but also an area of discovery for botanists, inspiration for artists and a challenge to those who love to explore.

**COLLETON WAYSIDE PARK:** also operated by the State Commission of Forestry. A 35-acre park 12 miles north of Walterboro on US 15. Picnicking and camping facilities are used by hundreds of out-of-state tourists on this popular highway each year.



Vest-pocket visual aid to Rangers and Wardens for the word-of-mouth phase of their educational program is a little tree embedded in clear plastic developed by the S. C. State Commission of Forestry. It is difficult to rationalize indiscriminate woods burning when confronted with this fire prevention tool that clinches the point that even little fires kill little trees.



# INFORMATION AND EDUCATION

## INTRODUCTION

In view of the fact that 93% of the forest land in South Carolina is in private ownership, it follows that the approach to forest conservation problems should be basically educational in character. This principle has been followed since 1927 when the legislative act created the Commission "to inform the people of the State as to the forest conditions."

The Commission's educational program is keyed to the following problems:

1. Forest Fire Protection.

More than 6,000 illegal woods fires occur every year in South Carolina.

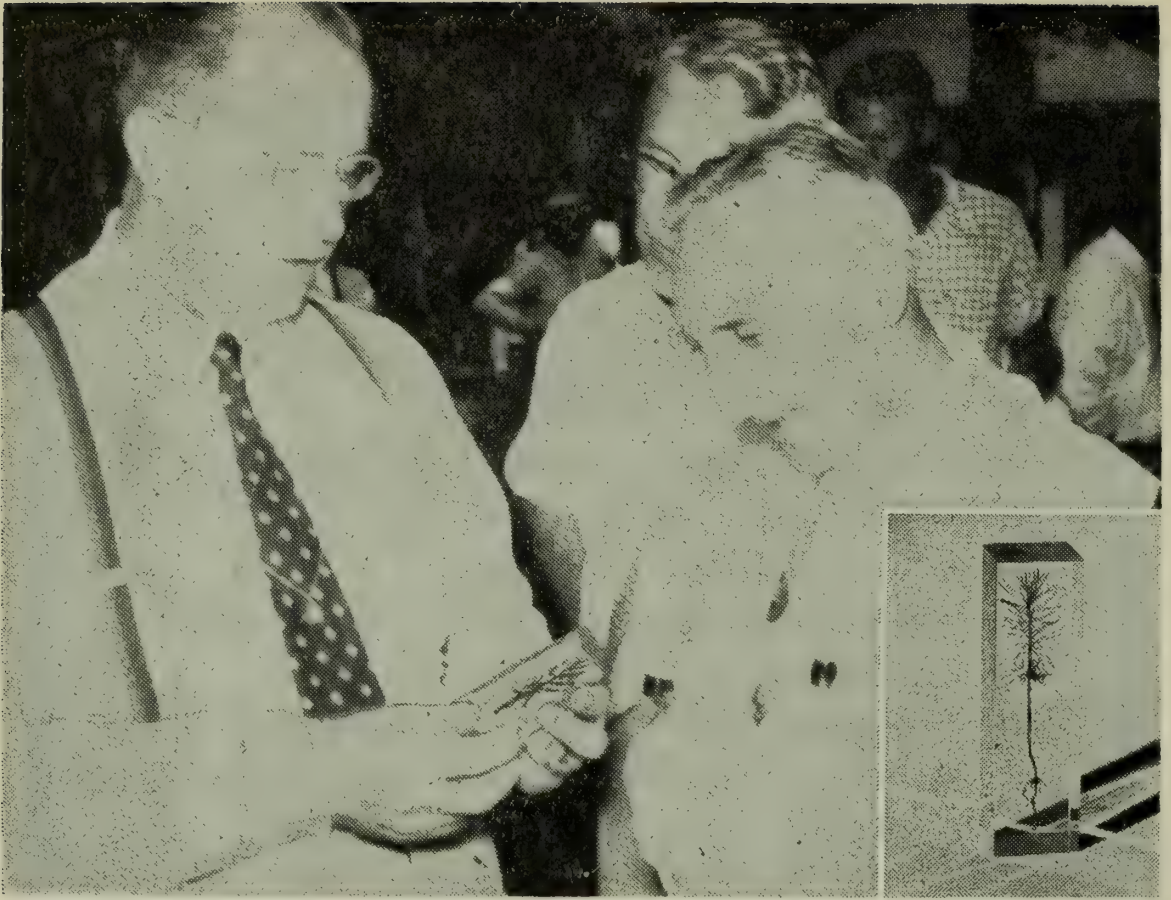
Landowners burn their own woods in all too many cases.

2. Unwise cutting practices mean low production and inferior quality raw products.
3. Some 1½ million acres of idle land or unproductive forest land should be planted to trees.
4. Species of inferior quality occupy much of the existing forest land in the State. These inferior trees must be replaced with trees of good quality to achieve full woodland production.
5. Full use and appreciation of South Carolina's state parks.

### Forest Fire Prevention

The guiding philosophy of forest fire prevention as carried out by the Commission today was developed in June 1950. It was then that the decision was made to direct major emphasis to the damage caused by the average slow burning quiet fire that South Carolinians are accustomed to seeing. This damage has been emphasized in terms of little trees hidden from the eye of the casual observer and destroyed in any fire that would burn the grass or woods litter close to the ground.

This approach, after four years, has proved to be the most realistic and most effective method of teaching forest fire prevention in South Carolina. It was clear at the outset that the program be developed and carried out by the State Commission of Forestry. It was also clear that it could only be done through



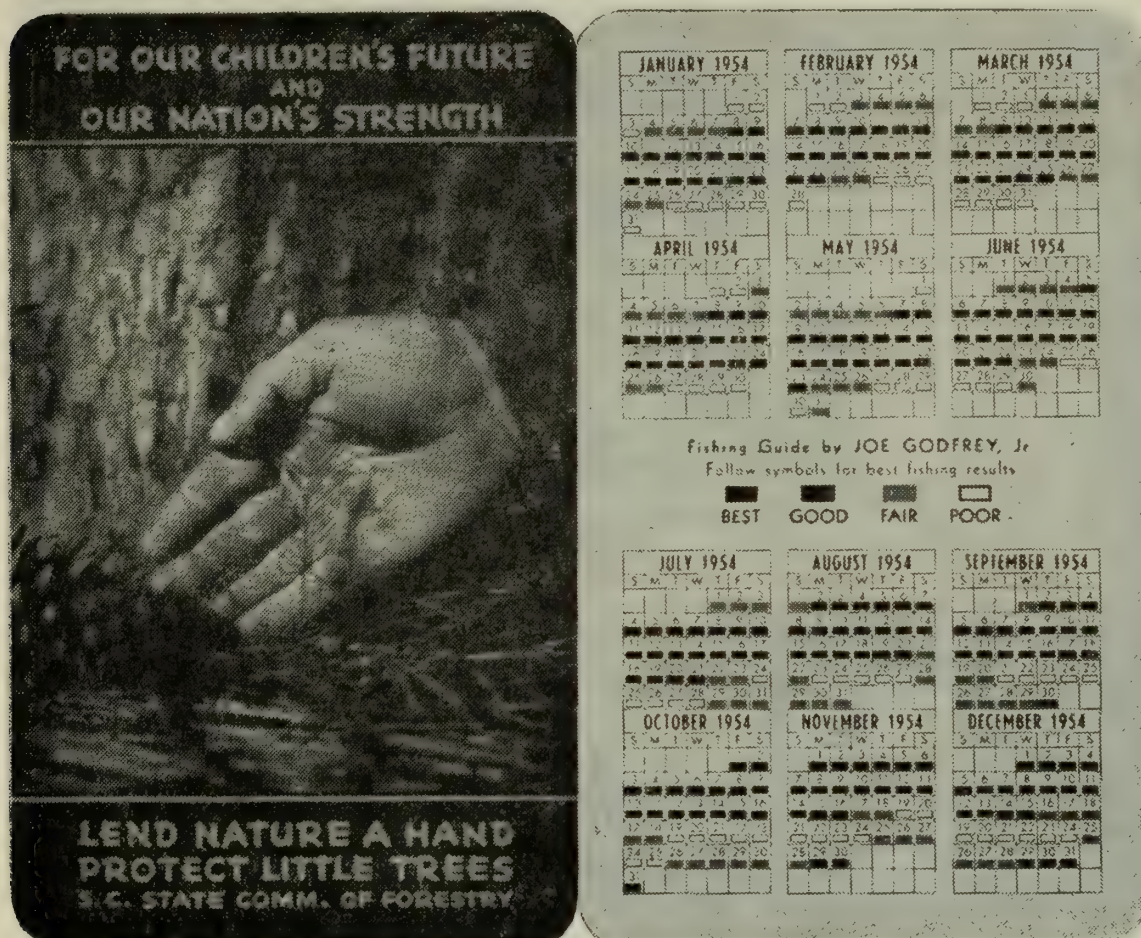
United States Secretary of Agriculture Ezra Taft Benson (left) is shown receiving South Carolina's little tree in plastic from State Forester C. H. Flory as Clemson Extension Forester C. W. Hall looks on. The scene was a meeting of the Darlington County Agriculture Society, September 1, 1953. Insert shows enlargement of little tree in plastic.

the support and active cooperation of many other groups within the State.

Commission personnel in each county organization conducted the most intensive and best integrated fire prevention program to date. Using materials developed during the latter part of 1952-53, intensive effort began in the fall of 1953. On the premise that face to face contact with people is the best way to teach forest fire prevention, the Commission's rangers and wardens in all counties were equipped with personal teaching aids. The most important was a little pine tree embedded in a block of clear plastic approximately  $1\frac{1}{4}$ " wide by  $4\frac{1}{2}$ " long. In this way fire fighting personnel could carry a little tree in the pocket and thus be ready to talk fire prevention at every opportunity. This device gave powerful support to the point that "even little fires kill little trees." After such a discussion the ranger or warden would give the person a plastic pocket calendar carrying a full color illustration of the hand behind the little tree and the message "For



our children's future and our nation's strength—Lend nature a hand protect little trees.” The fishing guide on the back of the calendar added interest. Some 12,500 of these calendars were distributed during 1953-54.



Some 12,500 pocket calendars printed in color on plastic were distributed by Commission personnel through their personal contacts.

Recognizing the need for public display of the idea expressed in the above illustration the Commission produced its first wall calendar, measuring 21 by 28 inches. It carried a 7½" by 10½" natural color photograph of the hand behind the little tree with the message "Lend Nature a hand—Protect little trees." Some 3,750 of these calendars were distributed by State Commission of Forestry personnel. This was made economical through a co-operative agreement with the West Virginia Pulp and Paper Company who financed their own issue of such a calendar and the plates from which Commission calendars were printed.

Using the little tree embedded in plastic, the ranger or warden would focus the attention of a storekeeper, for example, on the fire prevention problem in that county. This indoctrination dis-



cussion would enable the storekeeper later to the large wall calendar in his store and further extend the idea that "no matter how you look at it, even little fires kill little trees."

**PROTECT  
LITTLE  
TREES**



**LEND  
NATURE  
A HAND**

**SOUTH CAROLINA STATE COMMISSION  
OF FORESTRY**

**JANUARY 1954**

FIRST MONTH	SUN	MON	TUE	WED	THU	FRI	SAT	FIRST MONTH
	○ <small>NEW MOON 4A</small>	○ <small>FIRST QUART. 12M</small>	● <small>FULL MOON 12M</small>	○ <small>LAST QUART. 12M</small>		<b>1</b> <small>NEW YEAR'S DAY</small>	<b>2</b>	
	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	
	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	
	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	
	<b>24</b> <small>31</small>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	

<b>DECEMBER 1953</b>						
SUN	MON	TUE	WED	THU	FRI	SAT
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<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>
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<b>FEBRUARY 1954</b>						
SUN	MON	TUE	WED	THU	FRI	SAT
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Some 3,700 wall calendars for 1954 were placed at strategic locations throughout the state by Rangers and Wardens.



Once again, county personnel made effective use of their 35 mm slide projector and colored slides. In addition to showing to family and other adult groups, educational programs were again conducted in the classroom. At the conclusion of such a school program the ranger or warden would ask the children if they would like to have a natural color photograph of the hand behind the little tree "for their very own." The response was always enthusiastic and many of these photographs were eventually framed by the children for a permanent addition to their classroom. Some 4,000 copies of these photographs were distributed.

In order to reach a broad segment of the public, a most important distribution was made through the cooperation of the State School Book Commission. A full color reproduction of the hand behind the little tree was printed on school book covers used by some quarter of a million school children in South Carolina, beginning in the fall of 1953. The message accompanying the photograph was addressed to these children as follows: "For your future and our nation's strength—Lend nature a hand protect little trees."

As an indication of the value of this single photograph, it was used as the basis of a national advertisement used in 1953 by the Cooperative Forest Fire Prevention Campaign by Foote, Cone and Belding of Los Angeles, California, under the direction of the Advertising Council.

In the July 18, 1953 issue of *Tide*, a national magazine of the advertising profession, the Foote, Cone and Belding ad was reproduced. The editors of *Tide* raised the question, "Photograph of the year?"

By all standards of teaching, the most effective fire prevention approach was the personal visit and individual demonstration to the landowner in his own woods. This demonstration was accompanied by the simple technique of the ranger or warden laying out a 1/1,000 acre plot on the ground. Such a plot measures approximately 6' 7" by 6' 7" and is simple to stake out on the ground. After this known area is laid out the teacher parts the grass with his hands and allows the landowner to discover his own little trees provided by nature. Usually several little trees are found on this sample plot, and that number multiplied by a thousand equals the number per acre if the plot is a fairly repre-

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## TINY-but important beyond words!



Each year thousands of insignificant-looking fires are smoldering away, waiting for the wind to become violent and devour our forests and lands. They don't often kill the big trees. They seem to do little or no damage.

There's just one catch.

Down in that grass and brush are tiny trees—the future woods and forests of America—the trees that your children will someday

need in the forest to come. For tiny these small trees.

No, it is mighty important that we prevent these "insignificant" fires, for they are forest fire-timers, just as destructive, just as costly.

For America, for your children, please be careful—extra careful—with matches, smokers, campfires. Think of those tiny trees, hidden in the grass.

## Remember—only you can PREVENT FOREST FIRES!

Like other American business firms, we believe that business has a responsibility to contribute to the public welfare. This advertisement is therefore sponsored in cooperation with The Advertising Council and U. S. and State Forest Services by:

AD COUNCIL COPY  
*Photograph of the year?*

July 18, 1953 • Tide

The Commission photograph of the hand and little tree continued to be used. The Advertising Council forest fire prevention ad of 1953 was reproduced by the nationally circulated advertising magazine, Tide in the July 18, 1953 issue. Tide's editors raised the question, "Photograph of the year?"



sentative sample of the area. When the landowner realizes that he has from one to several thousand little trees per acre hidden in the grass, adding at least \$10.00 per acre to the value of his land he receives his best reasoning in the need for fire prevention. It has been the experience of Commission personnel that most landowners are surprised to learn of the existence of these little trees. Even experienced woodsmen have registered surprise and keen interest in such a demonstration.

Knowledge and understanding of these efforts of Commission personnel in their day to day contacts with landowners in each county give point to other efforts embodying the Commission's little tree idea of forest fire prevention. For example, whenever other organizations use a sketch of the hand behind the little tree or use the term "protect little trees", and other related simplifications it serves as a reminder of the more complete story.

### **Keep South Carolina Green**

An important contribution to the forest fire prevention program in South Carolina is the KEEP SOUTH CAROLINA GREEN Movement launched in February 1953 by the South Carolina Forest Industries Committee. During this second year the modified seal was put into effect. Incorporating the sketch of the hand behind the little tree was a major contribution to the coordination of the elements of the over-all forest fire prevention program in South Carolina.

The most important development embodying the use of the new Keep Green seal was a contribution of the Commission to the Keep Green program. This was the beginning of the roadside sign project financed and executed by the Commission with permission from the State Highway Department. The signs were developed as a series of three messages, each being printed on a separate sign, but each sign carrying the Keep South Carolina Green seal in addition to the message. Each series of three is located in accordance with State Highway Department survey figures indicating traffic count. Hazardous woodland areas and heavily traveled highways were given priority. The three signs making up the sequence are spaced at intervals of less than  $\frac{1}{4}$  mile, and in the following order:



The official Keep South Carolina Green Seal was modified to incorporate the drawing of the hand behind the little tree to serve as a reminder that even average woods fires in South Carolina cause serious damage by killing little trees.

- (1) "Use Your Ash Tray"
- (2) "Prevent Woods Fires"
- (3) "Protect Little Trees"

This important contribution to Keep South Carolina Green was supported by the Garden Club of South Carolina working with the Keep South Carolina Green Committee of the South Carolina Forest Industries Committee. The signs are of Scotchlite material on 14 gauge steel 20" x 30". During 1953-54, 115 sets (or 345 signs) were prepared.

Another Commission-initiated development was the production of a large 4' Keep South Carolina Green seal. It was silk-screened in color on aluminum. The Commission developed the





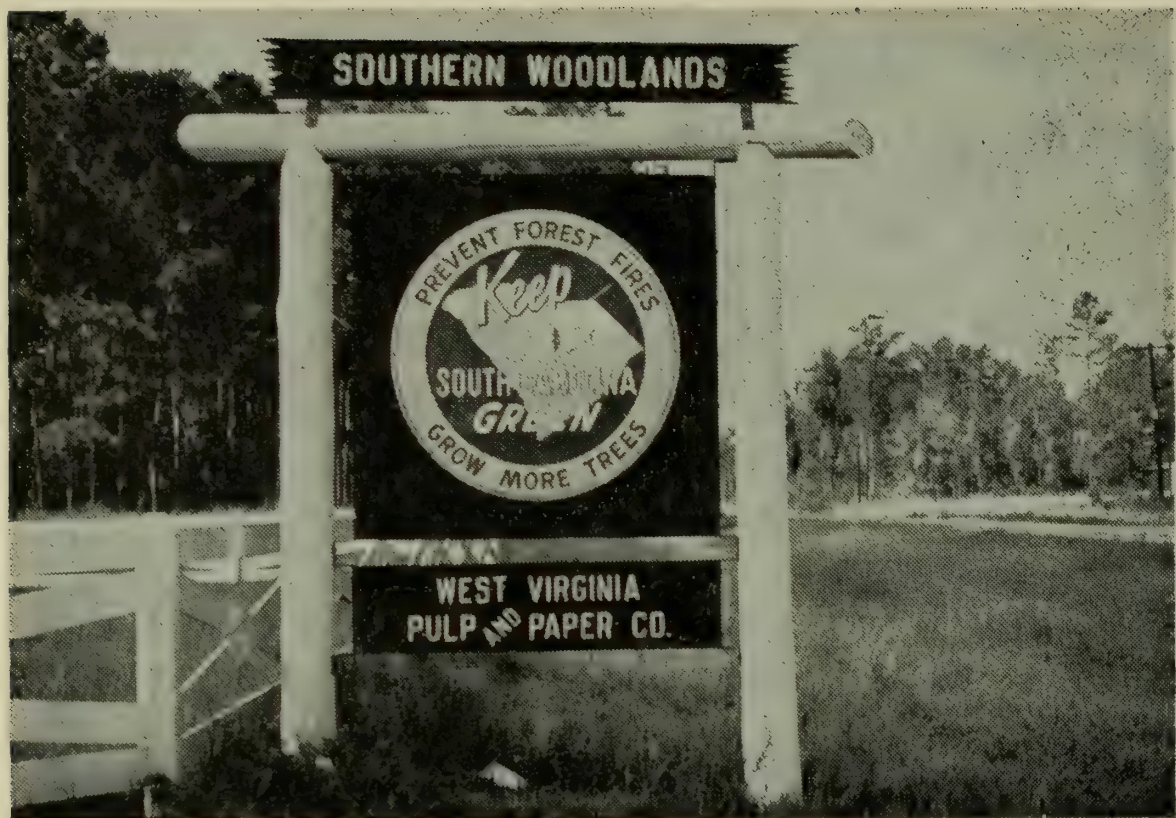
New forest fire prevention signs for highway travelers. Mrs. Clifton W. Carter, Conservation Chairman of the Garden Club of South Carolina (left) examines a display of new forest fire prevention roadside signs as Mrs. W. Jack Bryant, Past president of the Garden Club of South Carolina and State Forester Charles H. Flory look on. Rangers and Wardens of the S. C. State Commission of Forestry erected the colorful green and white reflectorized signs as part of the Keep South Carolina Green Campaign.

idea and financed the screen from which several companies had seals made for their own installations. More than 100 signs were produced from the screen and financed by industry.

### Cooperative Forest Fire Prevention Campaign

For the third successive year the Commission's philosophy was used by the Cooperative Forest Fire Prevention Campaign. This national program, featuring Smokey Bear, is guided by The Advertising Council, Incorporated, a non-profit organization, formed and backed by American business for the purpose of conducting educational campaigns in the interest of the nation's welfare. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in taking their assignment from The Advertising Council





The Commission cooperated with several wood-using industries to develop the large Keep South Carolina Green signs which are being displayed in South Carolina by several companies.

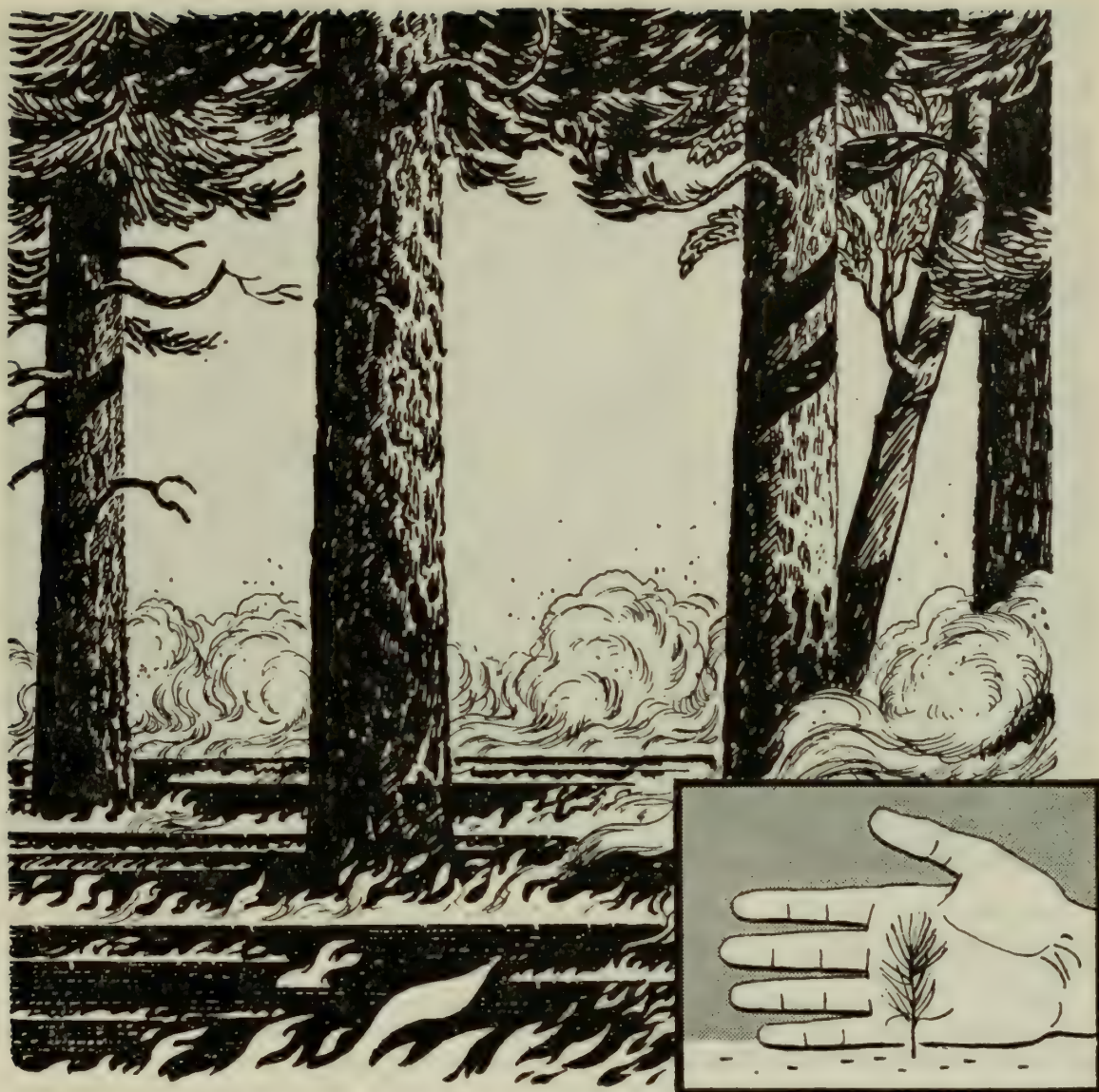
to make the Cooperative Forest Fire Prevention Campaign possible. A most significant contribution to the local forest fire problem in South Carolina this year was the preparation of another large advertisement to be financed by local sponsors. This ad was entitled "Harmless fire . . . or is it?" The popular appeal of Smokey Bear was once again harnessed to the Commission's philosophy of fire prevention education in South Carolina.

In support of this national campaign a wide variety of materials featuring Smokey were used. On February 26 the State Commission of Forestry and the U. S. Forest Service presented to Governor James F. Byrnes a teddy bear model of Smokey Bear. A similar presentation had been made by local organizations to the governors of other states and by a national committee to the President of the United States.

### Forest Fire Record

For the past three calendar years the record of fire occurrence has shown a significant decline until the period January 1 - June 30, 1954. During this period rainfall deficiency became critical and crops of all kinds suffered. Although individual trees did





## Harmless fire... or is it?

Looks harmless enough. Doesn't seem to bother the big trees much.

But the truth is, this kind of uncontrolled, slow-burning grass or brush fire does *untold* damage across the nation each year.

Why? Because in that grass and brush are tiny trees—the future woods of America—the *timber that your children will urgently need*. *Fire kills these small trees.*

It is mighty important that we prevent these "harmless" fires. For they are forest fires, too . . . just as destructive, just as shameful, just as *costly*.

For America, for your children, please be *extra careful* with matches, smokes, campfires, *any* fire. Be sure that every flame, every spark is *dead out*. Think of those tiny trees . . . hidden in the grass.

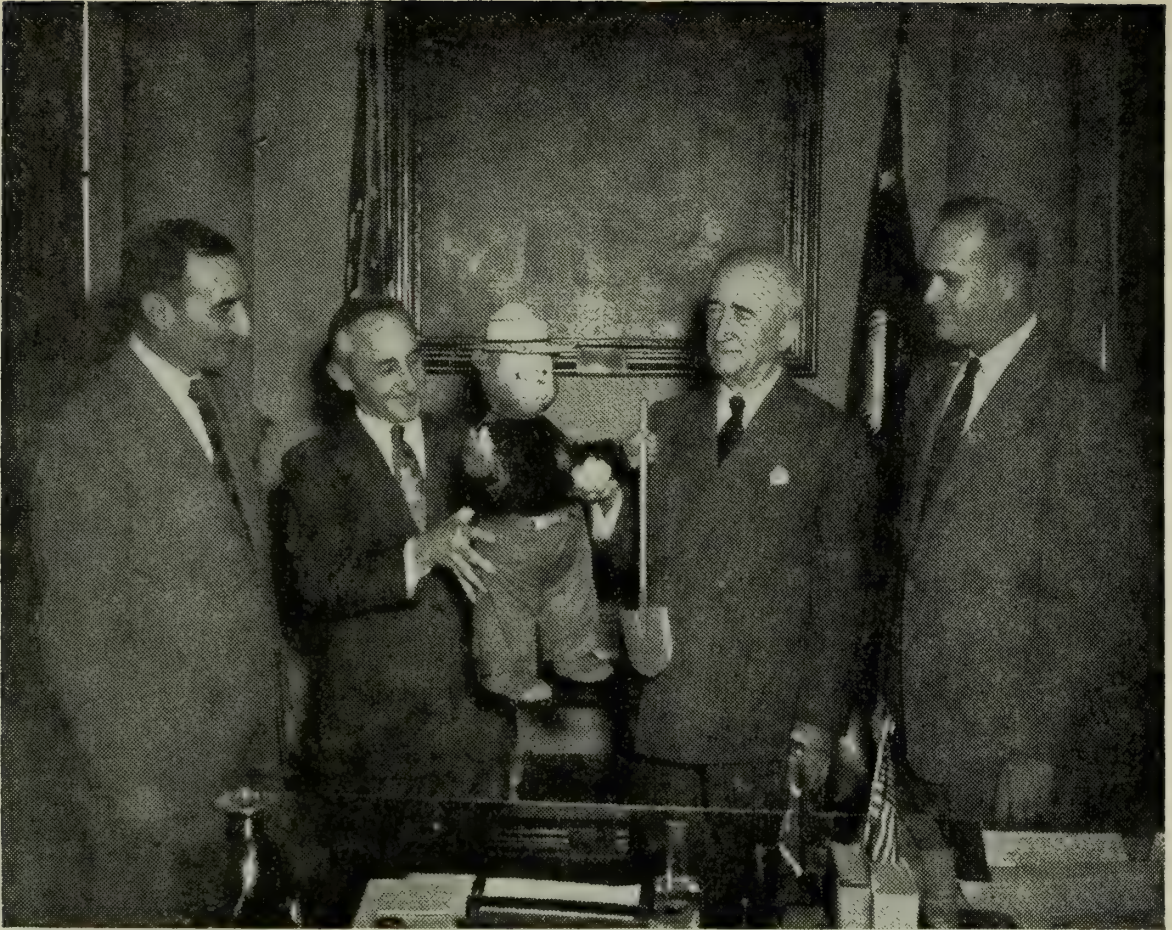


*Remember—* **Only you can**  
**PREVENT WOODS FIRES!**

Like other American business firms, we believe that business has a responsibility to contribute to the public welfare. This advertisement is therefore sponsored in cooperation with The Advertising Council and U.S. and State Forest Services by:

One of the newspaper ads used in the nationwide Cooperative Forest Fire Prevention Campaign which expresses the Commission's philosophy of fire prevention education in South Carolina. This is the second year that a major component of the campaign expressed this philosophy.





**Governor Gets a Bear**—Governor Byrnes gives visible support to Smokey Bear as he accepts this model as a symbol of the nationwide Cooperative Forest Fire Prevention Campaign. R. J. Riebold, Supervisor of National Forests in South Carolina, left, and John R. Tiller, Assistant State Forester in charge of Forest Fire Protection, far right, observe the joint bear-handling technique of State Forester C. H. Flory and Governor Byrnes at the presentation in the Governor's office.

die because of drought, the timber crop suffered chiefly from the rising fire hazard. Grass and woods litter on the ground became a highly inflammable fuel. Sometimes it took only a spark to start a woods fire. These conditions made control exceptionally difficult. As the drought continued into late spring and early summer, 1954, it became clear that South Carolina would have a year 'round fire season. In fact, the largest forest fire to occur in South Carolina since the late 30's occurred on June 27, 1954. This fire burned over 10,000 acres in four days. More man power and equipment were massed to fight this forest fire than ever before in the history of the State.

The function of the information and education branch was to keep the public informed accurately on the progress of this fire. Press relations representatives on the fire line and in the district office, as well as in the Columbia office, kept the people of the State informed from day to day.



The continuation of the fire season through the summer months makes it more imperative than ever that a continuous program of fire prevention education be intensified.

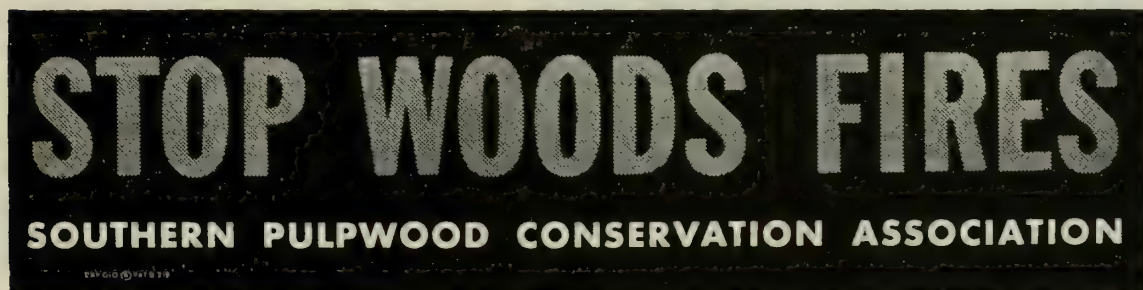
### **Selling Forest Tree Seedlings**

A record crop of 35 million forest tree seedlings was completely sold out by early January of the winter planting season 1953-54. To evaluate the sales effort, 1953-54 should be compared with 1952-53, when only 26 million trees were ordered with the added inducement of 3,000 free trees offered any landowner in the State. The demand for seedlings had exceeded the supply for years, but the supply had never before reached 35 million and this year none were given away by the Commission. All agencies interested in agriculture and in timber production cooperated in this job of mass education. Private industries and government agencies kept the subject before the landowners in the State.

### **SCHOOL PROGRAMS**

Commission personnel conducted 1,235 programs in schools throughout the state. Though material was prepared primarily for the fifth and sixth grades, many other grade levels were reached also. Colored slides formed the basic media of instruction. With the help of a slide projector in each county of the state this phase of the Commission's educational program is designed to bring into the school curriculum valuable training in the stewardship of everyone in respect to our forest resources.

Fire prevention signs carrying the message "Stop Woods Fires", and furnished by the Southern Pulpwood Conservation Association were placed in over 3,600 school buses this year by Commission personnel in cooperation with the Education Finance Commission and the State Highway Department.



One of the Stop Woods Fires signs placed in over 3,600 school buses during the year by Commission personnel in cooperation with the State Educational Finance Commission and the State Highway Department.



## CAMP HO-NAN-WAH OF BOY SCOUTS OF AMERICA



Reprinted from AMERICAN FORESTS  
April 1953  
magazine of  
The American Forestry Association  
Washington, D. C.

## LEGEND

- PUBLIC ROAD
- CAMP ROAD
- TRAIL
- TRAIL FEEDING STRIPS
- SALT MARSH
- STREAM
- STREAM-Intermittent
- 1A: PLOTS-Woodland Management

## CONSERVATION



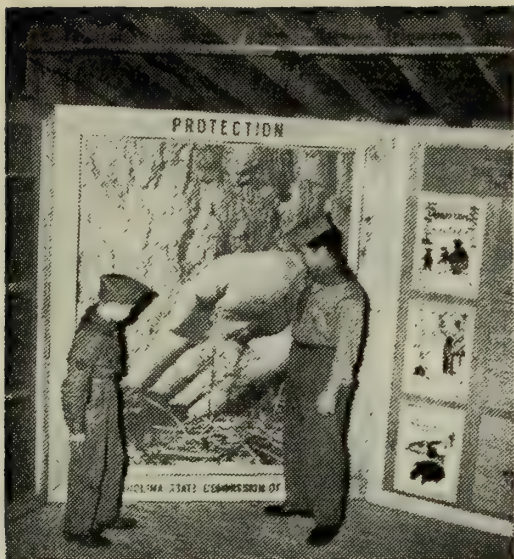
SOMETHING new was added to Boy Scout camping when the Coastal Carolina Scout Council, with headquarters in Charleston, South Carolina, launched its conservation program recently. Through a combination of the features of a farmers' field day and a county fair, Scouts and leaders not only learned at first hand the need for the intelligent management of forest resources, but they actually carried out conservation practices on the land.

The idea for the unique conservation camp project—a community forest—started when the Council Executive Board approved the conservation plan for its 162-acre campsite and thus became a co-operator of the Charleston Soil Conservation District.

The campsite, formerly part of a large plantation, now is largely covered with trees. Although part of the area is suited for cultivated crops or pasture, obviously such activities would conflict with the primary use of the land—Scout camping. But growing trees does fit in with camp-

A great part of the national movement, "Conservation Good Turn," launched in 1954 by the Boy Scouts of America had its beginning in the first Conservation Camporee held in South Carolina in February, 1953. The above pages were reprinted from the April 1953 issue of American Forests. This article was the forerunner of many national articles that became part of the "Conservation Good Turn" effort. The influence of the South Carolina State Commission of Forestry can be traced from the Camporee to guides and instructions used nationally.





Exhibits give Scouts insight into conservation's meaning



"Learn to do by doing," is a good rule in tree planting

# Camporee

By TED S. PETTIT

ing, so the largest part of the conservation plan calls for the management of the forest to produce some cash income for camp maintenance; lumber for new buildings; wood for fuel; and poles for campcraft projects.

A two and one half acre plot is kept in pasture and a four-acre plot is planted in various truck crops by neighboring farmers, under good land-use practices. These small areas produce a small cash return, but their primary purpose is for conservation education. About 40 percent of the Scouts in the Council are farm boys, and these areas with the woodlot, provide demonstration laboratories in which Scouts learn practices which may be applied on their own farms.

During the week before the conservation camporee (and for the uninitiated in Scout terminology, a camporee is a special weekend or overnight camp) six demonstrations and activity areas were set up around the campsite.

These areas were: 1) soil profiles for instruction in soil types and land

capability; 2) pine seedling planting; 3) wildlife food shrub planting; 4) woodlot management; 5) pasture improvement; 6) woods fire prevention and control.

Since setting up these demonstration areas required considerable time and machinery, outside help was needed. Technicians of the Soil Conservation Service and South Carolina Commission of Forestry, farmer-cooperators of the Soil Conservation District and a farm equipment dealer supplied men and equipment for such jobs as plowing seedbeds, removing brush, leveling land and plowing the pasture, marking trees for improvement cuttings, and building fire breaks.

But so that Scouts would not miss the thrill of seeing the equipment in action, finishing touches were left for the last minute and some of the heavy work continued while Scouts watched and worked.

The program itself started on a Friday evening in the camp dining hall. Soil and forest technicians briefly outlined the need for the conservation of soil, water, grass, forest and wildlife resources and showed dramatic movies to illustrate their points.

The work-on-the-land part of the program started at 8:30 the next day as groups of 50 Scouts and leaders arrived at each of the six activity areas. At the end of each hour, each group moved to the next station, so that after six hours each boy had taken part in each of the six activities. Of course, they took time out for lunch, and that was a beef stew supplied by the Charleston Chamber of Commerce.

Some 50 thousand slash pine seedlings were planted in the course of the day by six groups of 50 Scouts each.

**Boy Scouts of the Coastal Carolina Council learn by experience how to use natural resources wisely**

## CONSERVATION GOOD TURN

In February 1953 at Camp Ho-nan-wah the State Commission of Forestry assisted the Coastal Carolina Council of the Boy Scouts of America with the first Conservation Camporee held in South Carolina. It was also one of the first held in the United States. Field demonstrations and lesson plans prepared by the Commission were described in articles appearing in several



national magazines including "American Forests" and "Scouting." The thinking of the Commission, including the little tree philosophy of forest fire prevention, was incorporated into a special booklet entitled "Conservation Good Turn" prepared by the Boy Scouts of America as the reference manual for scout organizations throughout the United States to use in observing Conservation Good Turn nationwide which was launched by President Eisenhower early in 1954.

As an outgrowth of this endeavor, during 1953-54 more than 3,000 Scouts and Leaders attended 9 Conservation Camporees in South Carolina. Some lasted for a day and some were overnight endeavors. All of them included instruction in forest conservation as taught by Commission personnel.

### **OTHER FORESTRY DEMONSTRATIONS**

A demonstration is an effective way to get forestry information before the people. During a demonstration the actual forestry practice, whether it be fire control, reforestation, cutting or other activities, is carried out on the ground. For example, if the demonstration concerns planting, the group is taken through the planting process step by step with demonstrations and explanations. To complete the demonstration, printed material on planting is given each person present. Demonstrations on other phases of forestry are conducted in a similar manner.

During the year, 2,215 persons attended 127 demonstrations conducted by personnel of the Forestry Commission on forest fire protection, correct cutting methods, reforestation, and other forestry activities.

### **GEORGETOWN TIMBER FESTIVAL**

During the late summer of 1953 the people of Georgetown County with the leadership of the Georgetown County Chamber of Commerce felt that some expression of appreciation to the wood using industry of the county should be expressed with the appropriate activities because of the dependence of the economy of the county on forest products. As an outgrowth of this interest, the first Georgetown Timber Festival was held Sept. 2-5, 1953. This was a gala occasion, the activities of which ran the gamut from boat races to barbecues and industry "open houses" to an impressive street parade. The State Commission



of Forestry participated in the Timber Festival by providing exhibits for stores, motion pictures for continuous showing of free movies and floats for the parade. It was estimated that the Festival was attended by some 10,000 persons.

### CONSERVATION WEEK AND ARBOR DAY

Conservation week is the one week during the year that is especially set aside to call to the attention of all our people the necessity of wise use of all our natural resources. According to South Carolina law the first Friday in December is observed as Arbor Day and the week in which that Friday occurs is observed as Conservation Week.

Many people, agencies, and organizations cooperate each year to make Conservation Week a success. The Garden Clubs and the Federated Women's Clubs of South Carolina sponsor the observance of Conservation Week with the Commission of Forestry. Clemson College Extension Service, the Soil Conservation Service, the State Department of Education, newspapers, radio stations, and other groups cooperate in placing the challenge of Conservation before the people of South Carolina.

Realizing that special school materials are needed during Conservation Week, the Forestry Commission prepares a special issue of "Forestry and Park Notes" each year. This is distributed to schools, churches, civic and patriotic organizations and other interested groups.

Personnel of the Forestry Commission and other cooperating groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

A total of 1,029 Conservation Week and Arbor Day programs were held, with 92,947 persons attending.

### MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement lectures or talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus.

Films on forest fire control, forest management, reforestation and other forestry subjects were shown to school groups, church

gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others. During the year 309 showings were made to 17,534 people.

### **VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM**

An excellent means of getting forestry information to many people is through the school forestry program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. For several years forestry training schools were held for all vocational agriculture teachers in the state. They learned the latest methods of forest fire protection, reforestation and forest management at these meetings conducted by foresters of the State Commission of Forestry. The teachers have carried the information back to their students who use it in their work on school forests and on home forestry projects.

School forests are excellent aids in teaching forestry. They are "out-door classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growths. They learn tree selections—which trees to cut—which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes.

The Forestry Commission sponsors the School Forest Contest, awarding modest prizes to the schools and teachers who have the best school forests. This year the following schools were awarded prizes in the contest:

The Smoaks High School FFA Chapter won first prize in the lower-state division. The Pendleton High School FFA Chapter won first prize in the upper-state division. The Walterboro High School FFA Chapter won second prize in the low-country divis-



ion. The Blackstock High School FFA Chapter won second prize in the upper state division.

The Vocational Agriculture Teachers of the winning schools were also awarded prizes.

### RESOURCE-USE EDUCATION

Commission personnel participated in a number of workshops for teachers during the year to stimulate the teaching of conservation at various grade levels in the schools of the state. Two resource-use education workshops were held at the University of South Carolina, and one was held at Clemson College during the year in which Commission personnel assisted with instruction in forestry. The first Conservation Clinic, sponsored by the Garden Club of South Carolina, was held at Clemson during Farm and Home Week and Commission foresters participated in this program for teachers, school administrators, and garden club members. Commission personnel also took part in a pre-school training session for seventh grade teachers of Greenville in connection with the conservation education and school camping program carried on during the school year by these teachers at Table Rock and Paris Mountain State Parks. The Commission also participated in a workshop for Negro teachers at Mill Creek Group Camp sponsored by Benedict College, at which the subject of conservation education and camping in the teaching program was covered.

In addition to the workshops mentioned above, forestry and state parks personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation.

The Resource-Use Education movement has stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the state parks for this purpose. It has been demonstrated that using these facilities and camping on school time creates a very effective teaching situation.

The State Commission of Forestry welcomes this instructional use of state parks, and Commission personnel cooperated with several groups during the year to develop worthwhile projects in day camping and school camping at the state parks.

## TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and state parks before many groups. The quality of talks improved considerably during the year due to training, and the use of colored slides with the talks undoubtedly made the talks much more interesting. The Commission's Branch of Information and Education has nearly 2,000 colored slides on various phases of forestry and state park activities. The slides are available to all members of the organization and they have been used to illustrate talks and lectures as well as for training aids during personnel training sessions.

During the year a total of 1,010 talks were made by Commission personnel to 23,141 people. Garden clubs, church groups, school groups, civic and patriotic organizations were among those requesting talks.

## EXHIBITS

Forestry Commission personnel welcomed the many requests by county fair organizations, garden clubs, church, school and other groups for educational forestry and state park exhibits because they provide an excellent opportunity for placing forestry and state park information before the people.

The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits where practicable in an effort to attract the attention of people attending fairs and special gatherings.

Until the past several years an exhibit was rarely requested except for state and county fairs. During this year, garden clubs and other groups requested exhibits regularly throughout the year. This is an indication of interest in forestry and state park activities by various groups of people.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and state park information through personal contacts by Commission personnel on duty and through the distribution of literature.

Exhibits were installed by Commission personnel at 70 locations and were seen by an estimated 985,203 persons.





The use of exhibits is one method used to carry out the Commission's function "to inform the people of the State as to the forest conditions." Above is pictured the forestry exhibit as it appeared in the 1953 State Fair; below is an exhibit used in several flower shows and county fairs.



The following is a record of exhibits displayed:

## RECORD OF EXHIBITS

Location of Exhibit—County Fairs:	Type of Exhibit	Estimated Attendance
Aiken .....	Automatic Slide Projector.....	5,000
Bennettville (Marlboro).....	Smokey cutout and little tree blinker.....	35,000
Kingstree (Williamsburg).....	Smokey cutout and little tree blinker.....	2,350
Easley (Pickens).....	Automatic slide projector.....	15,000
Chesterfield .....	Little Tree Blinker and Smokey cutout.....	5,000
Greenwood .....	Miniature State Fair Exhibit.....	70,000
McCormick .....	Automatic Slide Projector.....	7,000
Anderson .....	Automatic Slide Projector.....	85,000
Camden (Kershaw).....	Smokey cutout and little tree blinker.....	15,000
Rock Hill (York).....	Smokey cutout and little tree blinker.....	8,000
Bishopville (Lee).....	Smokey cutout and little tree blinker.....	15,000
Greenville .....	Miniature State Fair Exhibit.....	35,000
Lancaster .....	Automatic Slide Projector.....	10,000
Moncks Corner (Berkeley).....	Little Tree Mural.....	3,500
Conway (Horry).....	Smokey cutout and little tree blinker.....	2,700
Marion .....	Smokey cutout and little tree blinker.....	25,000
Lancaster (N).....	Automatic Slide Projector.....	4,000
Walterboro (Colleton).....	Miniature State Fair Exhibit.....	5,000
Union .....	Smokey cutout and little tree blinker.....	25,000
Laurens .....	Smokey cutout and little tree blinker and auto- matic slide projector.....	26,000
Newberry .....	Automatic Slide Projector.....	25,000
Florence .....	State Fair Exhibit.....	60,000
Loris (Horry).....	"It Takes Men to Fight Forest Fires".....	4,100
Chester .....	Smokey cutout and little tree blinker.....	35,000
Camden (Kershaw)—(N).....	Panel Exhibit.....	8,000
Charleston .....	Miniature State Fair Exhibit.....	25,000
Sumter .....	State Fair Exhibit.....	30,000
Manning (Clarendon).....	Management exhibit.....	3,500
Chester (N).....	Automatic Slide Projector, Smokey cutout and little tree blinker.....	8,000
Sumter (N).....	State Fair Exhibit.....	15,000
Dillon .....	Smokey and Equipment.....	600
Orangeburg .....	Fire Prevention.....	20,000
Charleston (N).....	Protect Little Trees.....	20,000
Total .....		652,750
<b>State Fair</b>		
Columbia .....	Management, Planting and Fire Protection, State Parks are Yours to Enjoy.....	180,000
Columbia (N).....	Smokey cutout and little tree blinker, State Parks for Negroes.....	80,000
Total .....		260,000
<b>Exhibits other than County or State Fairs:</b>		
Clemson (Farm and Home Week)—Miniature State Fair Exhibit.....		15,000
Clemson (Conservation Clinic)—7 Steps in the Production of Timber.....		100
Columbia (Resource—Use Education Workshop, University of S. C.)—Miniature State Fair Exhibit .....		100
Table Rock State Park (Greenville Teachers In-Service Training Program)—7 Steps in the Production of Timber.....		30
Georgetown (First Annual Timber Festival)—Wood Products from S. C. Forests.....		10,000
Columbia (Annual Meeting of State Forestry Boards—Jefferson Hotel)—Miniature State Fair Exhibit.....		55
St. George (Gala Day)—Smokey cutout and little tree blinker.....		1,000
Greenwood (Garden Club Flower Show)—Murals.....		300
Columbia (Council on Social Work—Wade Hampton Hotel)—Murals—"State Parks Are Your to Enjoy".....		1,200
Columbia (S. C. Recreation Society—Jefferson Hotel)—Murals—"Enjoy Your State Parks" .....		200
Rock Hill (Children's Nature Museum)—Red Gum Cross Section.....		2,500
Asheville, N. C. (Lumber Dealers Association)—Red Gum Cross Section.....		800
Camden (Garden Club)—Automatic Slide Projector.....		700
Timmons ville—Miniature State Fair Exhibit.....		200
Rock Hill (High School)—Red Gum Cross Section.....		1,000
Lancaster (Merit Badge Show)—Photo murals.....		2,000
Camden (Christmas Parade)—Wood Products from S. C. Forests.....		10,000
Dillon (2)—Automatic Slide Changer.....		600
Georgetown (Flower Show)—Automatic Slide Projector.....		600



Hemingway (Flower Show)—Red Gum Block and Panel Exhibit.....	385
Andrews (Flower Show)—Automatic Slide Projector.....	350
Olar—Fire Prevention.....	126
Denmark—Fire Prevention.....	87
Orangeburg (2)—Fire Prevention.....	240
Anderson (Garden Club)—Photo Murals.....	2,200
Spartanburg (Garden Club)—Photo Murals.....	8,000
Kingstree (REA Electric)—Miniature State Fair Exhibit.....	5,000
Charleston (Boy Scout Camporee)—Protect Little Trees.....	300
Walterboro (Dist. Forestry Board Meeting)—Protect Little Trees.....	30
Camp Barstow (BSA Camporee)—Miniature State Fair Exhibit.....	250
Charleston (Garden Club)—Red Gum Cross Section.....	1,000
Sumter (Garden Club)—Photo Murals.....	500
Latta (Garden Clubs)—Automatic Slide Projector.....	200
Walterboro (Garden Club)—Red Gum Cross Section.....	1,000
St. George (Garden Club)—Little Tree Exhibit.....	500
Columbia (Columbia Garden Club)—Red Gum Cross Section.....	1,000
Columbia (Garden Club of S. C.)—Keep Green Highway Signs.....	500
Olanta (Garden Club)—Little Tree Exhibit.....	200
Conway (Electric Coop.)—Red Gum Cross Section.....	1,200
Shaw Field (Air Force)—Red Gum Cross Section.....	3,000
Total .....	72,453
GRAND TOTAL.....	985,203

Note (N): Negro

## RADIO AND TELEVISION

Radio and television are valuable for getting forestry and state park information to large numbers of people.

Radio stations in South Carolina generously cooperated with the Commission by providing air time for more than 450 programs on forest fire prevention and other phases of forestry, as well as information on state park facilities. As television stations come on the air in South Carolina, they will provide still another means of bringing to the people information on forestry and state parks.

Several districts have regularly scheduled programs on various radio stations. All districts have used radio to some extent. Many rangers are making use of local radio stations to give warnings of periods of high fire danger, to give tips on how to prevent fires, and to present other information on forestry.

During the year the recorded series "Jelly Elliott and the Three Knotheads" was broadcast by 25 radio stations. These programs, produced as part of the nationwide Cooperative Forest Fire Prevention Campaign, have been very popular in South Carolina, and several stations have repeated the series. This year's series of 13 programs combined hill-billy and folk music with stories and messages on forest fire prevention and on other phases of forestry.

Commission personnel appeared on 9 television programs, including a news program on film made of going fires in Sumter

and Clarendon Counties to illustrate the seriousness of the statewide fire hazard at that time. Commission personnel accompanied the WIS-TV news photographer by plane, by car, and on foot to obtain a dramatic sequence. At that time it was the longest news on film showing South Carolina news which WIS-TV had used on a news program.

The Commission of Forestry plans to continue using radio and television facilities to help do the job of informing and educating in the fields of forestry and state parks in South Carolina.

## TRAINING

The past year has seen a marked increase in appreciation of the place that every employee of the Forestry Commission has in doing the education job. Because the Forestry Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has paid untold benefits and has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective, talks and slide lectures in all phases of our work are more interesting and to the point. During district fire control training meetings, district and county unit personnel are trained to make the most effective use of materials they have to work with. This past year a great deal of time and training was spent on the new fire prevention plan and the new slide projectors which would be in use in every county. Stress was laid on the fact that the forest fire prevention program and an expanded forest management program depended on the effectiveness of the selling job of each member of the organization in his respective community.

The training of the Commission's technical foresters included a 4-day forest management training school conducted by the Branch of Forest Management at Burnt Gin Group Camp on Manchester State Forest. Training at this meeting included methods of managing and harvesting hardwood stands, control of undesirable species, and the relationship of soil type to timber management. Commission foresters are encouraged to attend meetings of the Society of American Foresters, and to keep abreast of the latest research and technical developments so they can render the highest type of technical forestry service to landowners.



The in-service training program of the Division of State Parks included a school for all State Park Superintendents who attended a 3-day training meeting during the year, at which various phases of state park administration, operation, maintenance and public relations were covered.

### **NEWS RELEASES AND ARTICLES**

Newspapers and magazines accepted and used material prepared by personnel of the Commission more readily than ever before. This is largely due to the constant effort to furnish better quality photographs and written material for the editors. The material is also more acceptable to the readers because it is more readable and more interesting. This improvement is due primarily to Information and Education training.

During the year Commission personnel prepared 962 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during fire situations, news items would be given orally to individual papers and to the wire services.

In addition to news releases, several feature articles on various phases of state parks and forestry were prepared. Pictures or prepared mats illustrating the story were usually sent with the feature.

Forestry Commission personnel in every county of the state prepared news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors. The excellent press coverage has helped place forestry and state park news before the people more prominently than ever before.

### **BOYS' FORESTRY CAMP**

The seventh Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 10-15. Seventy-three young men representing every county in the state attended the week-long camp. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject "Why I Would Like To Attend Boys' Forestry Camp." On invitation of the Commission, 20 FFA boys were selected by the Vocational Agriculture Section of the Division of Vocational Education, State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same man-





Boys from all over the state attended the seventh annual Boys Forestry Camp held at Cheraw State Park. The boys learned forest management and planting techniques, methods of forest fire prevention and control, better utilization of wood on the farm, and became more familiar with the recreational facilities of South Carolina's state parks.

ner 20 more were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program—of study and fun characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by state parks.

### **SIGN AND WOODWORKING SHOP**

The Commission's sign and woodworking shop continued to produce routed letter signs, picnic chairs and tables, fair exhibits, and other necessary cabinet and carpentry work. This work benefitted forestry greatly during the year. The distinctive routed letter signs identified the various forestry and state park installations with the Commission of Forestry. The Commission's fair exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.



## **SOUTH CAROLINA TREE FARMS SYSTEM**

The South Carolina Tree Farms System is part of a program initiated by woodusing industries to recognize the many deserving landowners who practice good forestry. To become a Tree Farmer a landowner must prevent woods fires and take all reasonable precautions against them. In addition, he must apply sound cutting practices to existing timber and must plant areas that will not reseed naturally. After a Tree Farmer is certified, his property is marked with a Tree Farm sign. His neighbors and people passing by may see good forestry practices and come to understand forest values. Tree farms are also effective places to hold demonstrations on all phases of forestry.



Tree Farm signs are signs of forestry progress over the state. More than ten percent of the state's woodland area have been certified under the Tree Farms Program.

The Tree Farm movement is sponsored in South Carolina by the State Commission of Forestry and the Clemson College Extension Service, with financial assistance from the Southern Pine Association, and is encouraged nationally by American Forest Products Industries, Inc.



Before a landowner can be certified as a Tree Farmer, his application must pass the County Tree Farm Committee which is made up of the District Forester, County Agent, and a member appointed by the County Forestry Board. After clearing this committee, the application goes to the State Committee which takes final action. This committee is made up of prominent citizens of the state interested in the advancement of forestry. They are: James H. Graham, Charleston; C. P. Key, Lodge; Oswald Lightsey, Miley; Director D. W. Watkins, Clemson; S. B. Huff, Piedmont; and State Forester C. H. Flory, Columbia. Assistant State Forester John C. Witherspoon is Secretary of the State Committee.

There are now 128 Tree Farms in the state comprising 1,192,472 acres. The following landowners qualified under the South Carolina Tree Farms System this year:

#### Tree Farm Certification

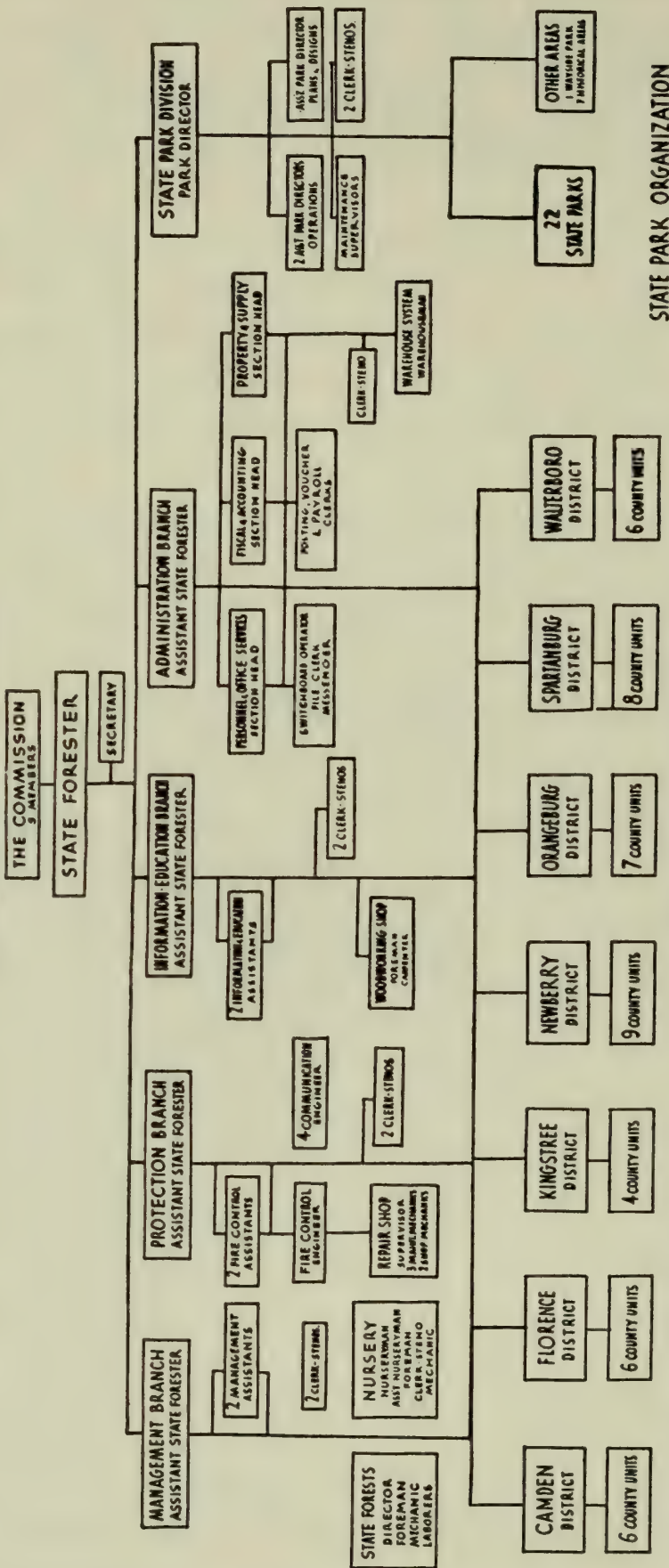
<i>Name—County</i>	<i>Acreage</i>
J. T. Clinkscales—Abbeville.....	370
Charles B. Abell—Chester and York.....	440
Dr. Stanley C. Baker—Laurens.....	100
Misses Nora and Mae Davis—McCormick.....	181
W. R. Cothran Estate—Greenwood and McCormick.....	490
J. Hearst Coleman—Greenwood.....	400
Frank J. Wideman—McCormick.....	273
C. Cooper Sanders, Jr.—Abbeville.....	106
David Dows—Greenwood.....	1,100
Henry G. Ligon—Pickens.....	24
J. B. Guess, Jr.—Bamberg.....	1,000
W. W. Woolsey—Aiken.....	500
Samuel H. Swint—Aiken.....	327
Mrs. Margaret Lloyd and Henry Savage, Jr.—Kershaw.....	800
Mrs. V. T. Chastain—Colleton.....	317
Willie Reed Bishop—Colleton.....	100
Union Bag & Paper Corp.—Additional acreage.....	987
R. C. DeLoach—Hampton.....	405
Mrs. Charles Cotesworth Pinckney—Charleston.....	250
C. J. Cate, Jr.—Richland.....	455



John C. Billingsley—Newberry	111
West Virginia Pulp & Paper Co.—Additional acreage	40,391
J. Roy Cunningham—Lancaster	300
International Paper Co.—Additional acreage	4,526
Clyde D. Ware—Abbeville	48
Total	54,001

# SOUTH CAROLINA STATE COMMISSION OF FORESTRY

## ORGANIZATION CHART



**DISTRICT OFFICE ORGANIZATION**  
DISTRICT FORESTER  
2 ASSISTANT FORESTERS  
DISTRICT RANGER  
CLERK-STENOGRAPHER

**COUNTY UNIT ORGANIZATION**  
COUNTY FORESTRY BOARD (MEMBERS 5)  
RANGER  
DISPATCHER  
WARDENS  
TRACTOR OPERATORS  
FLEXIBLE CREWS  
TOWER MEN  
VOLUNTEER CREWS

**STATE PARK ORGANIZATION**  
REGULAR  
SUPERINTENDENT  
RANGER  
FOREMAN  
LABORERS  
SEASONAL  
LIFE GUARDS  
BATH HOUSE OPERATORS  
CONCESSIONAIRE



## ADMINISTRATION

The Commission's administrative Branch is responsible for coordinating the activities of both central and field offices on fiscal and accounting, property and supply, and personnel and office services for both Divisions of the Commission—Forestry and State Parks.

### Personnel Accident and Injury

During the year 62 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

### Automotive Accidents

Continued emphasis was placed on the careful operation of the 154, Commission-owned motor vehicles through specific training and affiliation with the National Safety Council.

Of the ten automotive accidents which occurred during the fiscal year, seven were minor in nature and not the fault of our operator. The remaining three were of a serious nature and were the fault of our operator. A review of the employees driving records indicates that 80 of the 154 have operated Commission vehicles for a period of one to five years without an accident; 49 for six to ten years; 19 for eleven to fifteen years; and 6 for more than sixteen years.

### Commission Purchasing

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and fiscal procedure. A total of 1,969 requisitions were received and 2,039 purchase orders issued during the year.

Visual inventories were made during the year of all equipment in use by both the Divisions of Forestry and State Parks. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$970,939. In addition, the Commission has real property and improvements now estimated to be worth \$5,151,412.00.

### Personnel

Personnel employed by the Commission continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Fifteen percent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

### Training

The Commission of Forestry strives at all times to improve each and every activity through constant personnel training and supervision. At the annual State Park Superintendents' Meeting in September a portion of the training time was devoted to administration and instruction. A series of very successful administrative schools attended by all unit rangers and district office personnel were held in November. Subjects covered included budget preparation and fiscal control, property accountability, personnel records, leave, retirement and insurance, office administration and procedures.

Following the group meetings, individual on-the-job training and instruction was given resulting in improved performance in all phases of administrative work.



## APPENDIX

### FINANCIAL STATEMENT

#### SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1953—June 30, 1954

#### RECEIPTS

##### *Division of Forestry:*

Balance from 1952-53—Federal Fund .....	\$ 94.49	
Balance from 1952-53—Radio Comm. Fund.....	14,764.54	
State Appropriation—Operating .....	1,082,118.00	
State Appropriation — For Purchase Radio Short Wave Equipment.....	37,000.00	
Federal Funds — Protection CM Law Sec. 2..	268,069.00	
Federal Funds—Reforestation CM Law Sec. 4 and N. D.....	4,106.13	
Federal Funds—Cooperative Farm Management	23,458.99	
Federal Funds — 12-Mile Creek (Pickens) Watershed .....	3,177.60	
Nursery .....	84,715.38	
State Forests .....	35,194.67	
Marking and Tallying Timber.....	5,727.40	
Counties and Timber Firms.....	9,896.37	
Miscellaneous Receipts.....	1,727.93	
Radio Communication Project.....	8,671.31	
		<hr/>
Total Receipts—Forestry .....		\$1,578,721.81
Less Receipts Deposited to Cr. State Rev-		
		<hr/>
enue Account .....		127,365.38
		<hr/>
Total Receipts Available for Expenditures		\$1,451,356.43
Total Expenditures .....		1,444,183.64
		<hr/>
Balance—Division of Forestry.....		\$ 7,172.79*

##### *Division of State Parks:*

Balance from 1952-53 — Hunting Island De- posits .....	\$ 3,386.49
Balance from 1952-53—Myrtle Beach Fishing Pier .....	8,226.14
Balance from 1952-53—Cheraw Pk. Fire Dam- aged Timber .....	80.92
Appro. 1951-52—Ear Marked for Colored Park	49,950.00
Appro. 1952-53—Ear Marked for Andrew Jack- son Park .....	14,397.75

State Appropriation—Operating .....	359,692.00	
State Appropriation—Historical Areas .....	5,235.00	
Forests and Parks Fund—Hunting Island Deposits .....	1,555.00	
Myrtle Beach Fishing Pier .....	31,958.38	
Pleasant Ridge Park Fund .....	27,000.00	
Greenwood Park Fund .....	12,369.64	
Cabin Rentals .....	20,999.75	
Consession Stands .....	2,273.24	
Bathhouse Receipts .....	30,115.32	
Boat Rentals .....	3,513.75	
Group Camps .....	11,103.95	
Picnic Shelters and Recreation Bldgs. ....	1,743.25	
Miscellaneous Receipts .....	564.25	
<hr/>		
Total Receipts—Parks .....		\$ 584,164.83
Less Receipts Deposited to Cr. State Revenue Account .....		70,313.51
<hr/>		
Total Receipts Available for Expenditure .....		\$ 513,851.32
Total Expenditure .....		445,866.24
<hr/>		
Balance—Division of State Parks .....		\$ 67,985.08**

## EXPENDITURES

Administrative and Technical .....	\$ 364,068.50	
State Forest Nursery .....	68,901.56	
State Forest Projects .....	45,598.29	
Fire Protection .....	965,615.29	
<hr/>		
Total—Division of Forestry .....		\$ 1,444,183.64
Total—Division of State Parks .....		445,866.24
<hr/>		
Grand Total—Expenditures .....		\$ 1,890,049.88

## RECAPITULATION

*Funds Available:*

Division of Forestry .....	\$ 1,451,356.43	
Division of State Parks .....	513,851.32	
<hr/>		1,965,207.75

*Expenditures:*

Division of Forestry .....	\$ 1,444,183.64	
Division of State Parks .....	445,866.24	
<hr/>		—1,890,049.88

Balance .....	\$ 75,157.87**
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*Forestry: Federal Fund .....		\$ 5.72
Radio Communication .....		2,804.41
For Purchase of Short Wave Radio Equipment.....		4,362.66
**Parks: Appropriation—Ear-marked for Colored Park.....		49,950.00
Appropriation—Ear-marked for Andrew Jackson Park.....		602.43
Pleasant Ridge Park .....		197.36
Hunting Island Deposits .....		4,937.41
M. B. Fishing Pier .....		428.24
Greenwood Park .....		11,869.64
		<hr/>
		\$75,157.87

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1953-54

UNIT	Organized Personnel					Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Total	Organized Volunteers	Other Volunteers	
Abbeville .....	1	2	..	1	4	..	107	111
Aiken .....	1	4	1	5	11	..	1,000	1,011
Allendale .....	1	2	1	3	7	30	182	219
Anderson .....	1	2	..	3	6	5	158	169
Bamberg .....	1	2	1	2	6	11	348	365
Barnwell .....	1	2	1	2	6	..	733	739
Beaufort .....	1	3	1	3	8	14	236	258
Berkeley .....	1	4	2	4	11	..	888	899
Calhoun .....	1	2	1	2	6	6	128	140
Charleston .....	1	4	1	3	9	..	638	647
Cherokee .....	1	1	..	1	3	..	244	247
Chester .....	1	3	..	1	5	..	312	317
Chesterfield .....	1	3	1	4	9	10	213	232
Clarendon .....	1	3	1	3	8	19	536	563
Colleton .....	1	4	2	5	12	4	1,009	1,025
Darlington .....	1	2	..	3	6	5	1,108	1,119
Dillon .....	1	2	1	2	6	10	537	553
Dorchester .....	1	3	1	3	8	..	374	382
Edgefield .....	1	2	..	1	4	2	277	283
Fairfield .....	1	4	..	3	8	3	683	694
Florence .....	1	4	2	4	11	8	938	957
Georgetown .....	1	4	2	4	11	38	638	687
Greenville .....	1	3	..	4	8	8	944	960
Greenwood .....	1	2	..	2	5	15	139	159
Hampton .....	1	3	1	3	8	..	270	278
Horry .....	1	5	2	4	12	..	1,093	1,105
Jasper .....	1	3	1	2	7	..	493	500
Kershaw .....	1	3	2	6	12	9	229	250
Lancaster .....	1	3	1	2	7	6	412	425
Laurens .....	1	3	..	2	6	..	146	152
Lee .....	1	2	1	3	7	..	275	282
Lexington .....	1	3	2	5	11	..	667	678
McCormick .....	1	3	1	3	8	..	169	177
Marion .....	1	3	1	3	8	2	307	317
Marlboro .....	1	1	1	1	4	18	524	546
Newberry .....	1	2	1	2	6	..	260	266
Oconee .....	1	2	..	3	6	..	259	265
Orangeburg .....	1	5	2	5	13	..	1,046	1,059
Pickens .....	1	3	..	4	8	..	165	173
Richland .....	1	5	1	4	11	10	489	510
Saluda .....	1	2	..	1	4	..	236	240
Spartanburg .....	1	3	1	4	9	..	406	415
Sumter .....	1	3	1	3	8	2	800	810
Union .....	1	2	..	1	4	..	150	154
Williamsburg .....	1	5	2	4	12	407	773	1,192
York .....	1	2	..	4	7	18	635	660
Totals.....	46	133	40	137	356	660	22,174	23,190



TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1953 - JUNE 30, 1954

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	144	2.2	1,265.4	8.8
August .....	175	2.7	1,646.7	9.4
September .....	131	2.0	1,533.6	11.7
October .....	262	4.0	2,010.6	7.7
November .....	568	8.7	8,497.9	15.0
December .....	165	2.5	1,242.8	7.5
January .....	663	10.2	7,992.5	12.1
February .....	2,079	31.8	44,736.5	21.5
March .....	1,518	23.2	29,568.0	19.5
April .....	293	4.5	3,194.9	10.9
May .....	154	2.4	1,380.5	9.0
June .....	380	5.8	16,079.8	42.3
Totals.....	6,532	100.0	119,149.2	18.2

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1953-54

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	...	...	...	...	2	18.4	11	59.2	5	13.7	2	7.1	2	5.8	...	...	22	104.2
Aiken	...	6.8	...	...	1	1.6	83	469.8	36	584.4	73	996.8	3	11.4	...	563.0	253	2633.8
Allendale	...	...	...	...	3	43.5	40	707.0	28	164.5	27	223.0	...	...	4	12.0	102	1150.0
Anderson	...	...	...	...	3	9.6	18	95.9	14	138.0	9	48.3	...	...	1	41.0	46	359.8
Barnwell	...	...	...	...	5	89.1	25	165.2	60	710.8	44	829.0	...	...	6	5.5	142	1807.6
Barnwell	...	...	...	...	9	126.7	64	507.9	40	159.9	13	88.7	2	8.0	...	...	133	953.4
Beaufort	...	...	...	...	5	32.4	8	136.6	12	932.1	39	1724.2	1	16.0	...	...	72	3089.5
Berkeley	1	0.1	4	120.0	5	24.0	28	345.2	29	724.6	290	4429.7	2	57.0	6	134.2	367	5640.7
Calhoun	1	6.6	...	7.4	3	7.7	25	95.9	...	...	30	432.8	1	13.0	10	52.7	61	557.5
Charleston	...	...	...	...	3	108.0	42	865.4	...	...	74	2263.0	4	33.0	...	...	153	3560.8
Cherokee	...	...	...	...	1	1.0	21	121.0	8	221.2	4	32.0	1	14.4	...	...	38	396.1
Chester	...	...	...	...	6	118.0	15	82.7	10	162.9	14	101.6	2	13.0	...	...	60	549.7
Chesterfield	...	...	...	...	4	21.0	14	69.3	21	196.3	32	135.3	3	11.5	...	...	84	491.1
Clarendon	...	...	...	...	6	232.0	32	262.0	48	908.5	165	4061.9	2	10.0	...	...	263	5589.3
Colleton	...	...	...	...	5	19.0	55	495.9	96	1097.1	105	1910.0	6	35.5	...	...	275	3643.7
Darlington	1	12.0	...	...	8	124.8	70	698.5	54	591.5	12	589.3	2	6.0	6	23.1	155	2034.0
Dillon	1	0.1	...	...	8	63.5	25	170.4	35	460.5	52	716.1	8	103.4	7	12.3	139	1595.9
Dorchester	...	...	...	...	2	18.0	34	375.0	41	2547.8	49	2300.2	8	44.6	5	40.3	142	5344.9
Edgefield	...	...	...	...	...	...	15	52.5	12	98.7	7	34.2	1	26.0	6	21.0	44	285.7
Fairfield	2	44.0	...	...	...	...	28	529.0	6	42.5	3	20.5	16	54.5	5	22.1	82	868.4
Florence	2	2.5	12	151.4	8	45.9	94	1331.7	89	1590.9	166	2694.4	4	93.0	3	9.4	359	5727.4
Georgetown	...	...	...	...	2	6.2	25	331.0	14	238.5	97	898.4	9	18.9	...	...	165	1686.5
Greenville	...	...	...	...	4	36.1	112	534.4	45	162.4	49	737.0	1	1200.0	18	114.2	257	3404.4
Greenwood	3	1.5	...	...	...	...	16	142.5	11	248.0	6	22.0	1	5.0	43	733.0	...	481.5
Hampton	1	0.4	...	...	1	0.6	16	47.8	7	25.7	59	612.6	1	3.0	...	...	41	735.3
Horry	...	...	...	...	1	7.0	16	11703.1	84	3683.1	59	612.6	1	3.0	...	...	88	735.3
Jasper	...	...	...	...	3	41.9	94	205.8	30	531.0	195	7188.9	10	626.9	3	34.4	398	23442.8
Kershaw	...	...	...	...	1	4.8	16	341.0	30	531.0	102	3041.1	1	1.0	10	173.8	398	23442.8
Lancaster	3	25.0	...	...	4	40.4	35	409.5	12	308.9	3	53.0	5	272.0	2	20.0	156	3934.0
Laurens	...	...	...	...	3	1.7	30	393.5	19	119.1	10	112.1	1	5.0	8	300.7	70	1409.5
Lee	...	...	...	...	3	5.1	9	68.3	5	14.9	2	41.3	...	...	5	6.9	73	640.3
Lexington	...	...	...	...	...	...	16	391.2	14	167.6	36	889.1	...	...	1	0.9	25	137.0
Marion	3	10.6	...	...	...	...	53	296.7	40	164.2	13	35.4	2	19.0	5	92.8	73	1559.7
Marion	...	...	...	...	13	82.0	14	65.4	16	54.9	31	162.6	...	...	8	21.4	138	619.3
Marion	...	...	...	...	1	2.0	14	65.4	16	54.9	31	162.6	5	22.4	2	2.1	72	336.9



Marlboro .....	.....	.....	3	32.3	....	.....	33	312.9	49	1248.1	134	3698.1	7	14.0	6	96.9	232	5402.3
McCormick .....	.....	.....	...	.....	1	7.5	15	45.8	8	90.7	2	87.6	3	65.8	2	36.9	31	334.3
Newberry .....	2	40.0	1	0.1	....	.....	15	139.8	4	37.4	....	...	1	1.0	4	8.7	27	227.0
Oconee .....	1	2.4	6	11.5	....	5.0	25	49.8	26	242.8	8	29.8	4	18.1	5	13.1	76	372.5
Orangeburg .....	...	.....	1	3.0	13	399.6	130	2530.5	51	1234.3	422	8810.3	11	257.5	9	107.8	637	13343.0
Pickens .....	...	.....	2	1.7	1	1.2	16	53.5	15	38.6	9	33.8	2	5.2	7	7.3	52	141.3
Richland .....	...	.....	11	386.6	9	62.2	81	1001.6	30	343.6	63	1125.7	1	0.5	9	26.7	204	2946.9
Saluda .....	1	38.0	2	17.5	1	20.4	7	39.6	13	103.7	4	4.3	3	2.5	4	4.9	35	230.9
Spartanburg .....	...	.....	4	27.9	1	6.6	28	206.5	31	262.1	7	37.3	3	13.3	12	337.7	86	891.4
Sumter .....	3	15.0	1	6.9	....	.....	56	1357.8	48	2163.5	77	1810.7	7	327.7	12	489.6	204	6171.2
Union .....	1	2.0	...	.....	....	.....	13	126.9	7	53.0	1	0.5	1	1.5	5	17.2	28	201.1
Williamsburg .....	1	125.0	1	2.4	11	111.5	33	489.2	82	811.9	121	1833.6	6	119.0	9	58.4	264	3551.0
York .....	1	0.2	1	10.0	....	.....	37	110.5	34	241.1	17	84.0	2	14.8	16	106.0	108	566.6
Totals.....	37	356.5	111	1263.3	159	2081.5	1672	28699.7	1364	24180.3	2678	54987.1	161	3611.6	350	3969.2	6532	119149.2

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1953-54

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	Total No.
Abbeville .....	1	19	2	....	....	22
Aiken .....	23	176	51	3	....	253
Allendale .....	2	83	13	4	....	102
Anderson .....	2	36	8	....	....	46
Bamberg .....	5	108	26	3	....	142
Barnwell .....	6	105	22	....	....	133
Beaufort .....	5	37	24	5	1	72
Berkeley .....	35	217	109	5	1	367
Calhoun .....	3	44	14	....	....	61
Charleston .....	3	90	54	6	....	153
Cherokee .....	....	30	7	1	....	38
Chester .....	2	46	12	....	....	60
Chesterfield .....	10	64	10	....	....	84
Clarendon .....	20	161	74	7	1	263
Colleton .....	11	197	65	1	1	275
Darlington .....	14	102	35	4	....	155
Dillon .....	40	80	14	5	....	139
Dorchester .....	4	64	62	11	1	142
Edgefield .....	4	33	7	....	....	44
Fairfield .....	....	70	11	1	....	82
Florence .....	20	219	116	4	....	359
Georgetown .....	18	116	30	1	....	165
Greenville .....	71	166	15	2	3	257
Greenwood .....	2	31	7	1	....	41
Hampton .....	11	63	13	1	....	88
Horry .....	66	160	137	32	3	398
Jasper .....	19	87	39	10	1	156
Kershaw .....	5	43	18	4	....	70
Lancaster .....	13	47	12	1	....	73
Laurens .....	....	22	3	....	....	25
Lee .....	....	36	36	1	....	73
Lexington .....	16	112	10	....	....	138
Marion .....	11	54	7	....	....	72
Marlboro .....	25	129	68	9	1	232
McCormick .....	1	23	7	....	....	31
Newberry .....	4	17	6	....	....	27
Oconee .....	6	66	3	1	....	76
Orangeburg .....	....	349	263	25	....	637
Pickens .....	7	44	1	....	....	52
Richland .....	16	129	54	5	....	204
Saluda .....	3	28	4	....	....	35
Spartanburg .....	2	66	17	1	....	86
Sumter .....	8	102	81	13	....	204
Union .....	....	25	3	....	....	28
Williamsburg .....	40	151	69	4	....	264
York .....	5	89	13	1	....	108
Totals.....	559	4,136	1,652	172	13	6,532



UNIT	July 1953		Aug. 1953		Sept. 1953		Oct. 1953		Nov. 1953		Dec. 1953		Jan. 1954		Feb. 1954		March 1954		April 1954		May 1954		June 1954	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	2	5.0	4	4.4	8	51.6	18	68.1	6	28.4	3	3.2	17	57.6	8	31.2	7	35.2	16	110.7	10	31.1	9	24.8
Aiken	9	23.5	24	412.1	1	56.5	7	7.0	19	117.7	7	21.0	19	77.5	32	906.5	49	826.9	4	25.0	1	3.0	1	18.0
Allendale	2	22.0	4	3.0	1	5.0	2	6.2	10	56.5	5	17.0	5	6.5	10	272.0	22	643.0	4	25.0	1	3.0	2	14.0
Anderson	6	6.6	4	11.5	2	8.0	4	15.0	7	35.1	4	17.0	21	98.3	49	847.7	19	285.9	9	379.0	2	58.8	4	36.7
Bamberg	1	30.0	1	0.2	2	11.2	3	13.0	14	138.6	7	22.3	17	264.1	41	328.0	31	112.6	6	20.8	3	6.4	2	11.1
Barnwell	1	30.0	1	0.2	2	11.2	3	13.0	14	138.6	7	22.3	17	264.1	41	328.0	31	112.6	6	20.8	3	6.4	2	11.1
Beaufort	4	14.6	4	62.8	2	1.0	2	2.8	4	743.2	3	7.8	17	851.8	26	1208.9	8	164.0	5	63.5	3	23.5	10	422.7
Berkely	1	1.5	1	3.5	1	1.0	1	11.1	9	94.4	1	0.8	74	474.7	110	1552.6	119	2580.2	22	160.8	6	97.0	5	12.9
Calhoun	1	7.0	1	7.0	1	10.0	8	98.5	6	54.0	8	98.5	17	228.3	58	1735.6	27	1104.5	10	169.0	9	4.0	6	56.9
Charleston	5	28.5	6	45.5	2	13.0	2	68.5	8	56.2	1	3.0	2	5.0	12	46.0	6	139.0	3	44.4	2	7.3	5	50.6
Cherokee	1	0.1	2	4.0	2	13.0	4	10.0	7	23.6	1	3.0	2	5.0	3	3.0	3	109.9	9	154.3	4	9.2	3	32.0
Chesterfield	1	0.1	2	4.0	2	13.0	4	10.0	7	23.6	1	3.0	2	5.0	3	3.0	3	109.9	9	154.3	4	9.2	3	32.0
Clarendon	2	14.5	4	65.3	1	1.0	5	107.1	16	212.9	8	31.6	32	384.0	112	3019.4	57	1416.3	15	83.0	5	9.0	13	243.0
Colleton	6	6.1	10	65.3	3	2.6	9	36.1	15	88.2	6	9.8	25	155.4	103	1059.1	81	1918.7	9	129.5	3	56.0	8	42.5
Darlington	3	20.0	4	76.2	8	19.9	10	58.8	18	114.2	1	1.3	7	19.8	47	1038.7	29	481.2	8	29.2	6	37.7	21	236.4
Dillon	4	386.0	4	76.2	8	19.9	10	58.8	18	114.2	1	1.3	7	19.8	47	1038.7	29	481.2	8	29.2	6	37.7	21	236.4
Dorchester	6	69.0	6	69.0	1	6.5	3	13.6	6	32.7	4	63.7	22	258.2	41	1366.5	38	2294.2	4	212.0	4	31.2	4	15.0
Edgefield	9	59.0	7	60.4	3	36.0	4	7.2	16	75.0	1	1.0	2	7.8	7	91.4	10	56.6	2	8.0	1	0.1	14	484.3
Fairfield	1	11.0	6	66.2	4	12.3	22	214.9	4	644.9	11	229.6	34	415.3	122	2752.0	73	917.4	11	117.3	5	30.6	29	315.9
Florence	6	36.1	1	4.6	1	0.1	4	25.6	11	101.7	7	11.2	7	23.6	56	750.3	44	353.6	6	110.1	4	6.7	18	262.9
Georgetown	2	9.2	10	10.2	11	18.7	21	30.0	39	2595.8	9	30.6	18	47.1	55	170.0	70	385.4	9	39.5	6	54.3	7	13.6
Greenville	5	13.0	5	37.8	1	0.8	1	0.8	7	59.5	3	10.2	13	49.4	29	247.0	6	107.4	2	1.6	2	5.3	3	7.1
Hampton	6	28.2	3	115.5	3	99.1	16	406.6	18	258.6	5	54.2	54	986.2	146	7799.8	74	1732.6	18	104.0	17	234.4	38	11623.6
Horry	2	1.3	1	0.7	..	..	1	1.0	8	12.1	3	28.8	25	208.5	60	1634.8	55	1877.1	4	159.0	1	4.4	2	6.3
Jasper	3	45.5	4	5.5	5	8.2	3	11.0	8	138.7	1	0.2	2	27.0	9	218.4	22	687.6	3	35.0	3	28.1	11	219.0
Kershaw	6	18.1	2	0.3	..	..	..	..	12	186.6	..	..	2	4.6	13	28.7	16	126.5	..	..	1	0.5	2	1.5
Lancaster	1	11.0	..	..	..	..	..	129.5	5	106.9	4	73.8	3	59.2	26	571.6	12	308.0	4	6.5	1	0.5	2	1.5
Laurens	9	15.3	11	31.1	6	15.5	14	84.5	7	23.7	4	28.2	11	57.1	33	236.6	15	36.0	2	95.0	1	6.0	12	198.7
Lexington	2	3.3	..	..	4	28.5	8	20.5	9	27.6	..	..	5	8.5	25	142.2	14	82.2	7	21.9	12	52.3	9	17.1
Marion	5	19.9	1	0.6	1	1.5	8	36.8	21	461.0	14	113.0	29	324.4	90	1435.9	46	2917.8	6	24.7	1	0.1	10	66.6
Marlboro	..	..	1	11.0	4	15.5	1	3.4	4	105.4	3	50.0	2	4.1	5	18.4	8	92.4	..	..	1	0.8	1	33.3
McCormick	..	..	2	2.0	2	0.6	1	1.0	6	18.6	..	..	2	16.5	1	24.0	4	91.1	..	..	3	8.5	7	64.7
Newberry	..	..	4	9.2	6	67.0	10	22.8	9	21.4	4	11.2	3	6.3	23	204.0	9	9.9	3	13.2	2	3.0	3	4.5
Oconee	4	16.9	9	74.6	6	213.5	19	275.2	36	373.6	11	145.2	103	1870.0	234	6221.0	169	3460.8	26	381.9	7	162.1	13	148.2
Orangeburg	2	9.0	..	..	2	216.4	9	48.8	22	11.8	2	3.0	2	2.9	16	30.8	10	56.4	2	11.5	4	6.7	3	8.0
Pickens	11	31.6	8	36.6	13	216.4	9	48.8	22	11.8	2	3.0	2	2.9	16	30.8	10	56.4	2	11.5	4	6.7	3	8.0
Richland	3	2.8	3	38.3	4	11.5	1	0.8	3	3.0	..	..	3	3.5	4	7.2	10	92.4	11	50.6	5	18.6	26	222.0
Saluda	5	269.6	15	55.4	4	38.8	4	12.5	17	106.8	4	49.1	16	385.9	83	3789.3	49	1077.8	4	40.3	2	25.1	2	17.5
Spartanburg	6	57.0	..	..	3	38.8	4	12.5	17	106.8	4	49.1	16	385.9	83	3789.3	49	1077.8	10	45.0	1	1.5	4	52.4
Sumter	2	19.0	3	30.2	1	0.5	1	3.5	10	29.2	1	3.0	1	1.5	3	1.5	7	113.7	1	38.0	4	12.2	10	386.5
Union	2	23.2	7	30.2	7	21.3	4	6.2	17	63.5	1	0.4	7	25.5	23	163.6	13	59.0	4	9.5	3	5.8	15	158.4
Williamsburg	7	23.2	7	30.2	7	21.3	4	6.2	17	63.5	1	0.4	7	25.5	23	163.6	13	59.0	4	9.5	3	5.8	15	158.4
York	7	23.2	7	30.2	7	21.3	4	6.2	17	63.5	1	0.4	7	25.5	23	163.6	13	59.0	4	9.5	3	5.8	15	158.4
Totals	144	1265.4	175	1646.7	131	1533.6	262	2010.6	568	8497.9	165	1242.8	663	7992.5	2079	44736.5	1518	29568.0	293	3194.9	154	1380.5	380	16079.8

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1953-54

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	37	0.6	356.5	9.6
Railroads .....	111	1.7	1,263.3	11.4
Campers .....	159	2.4	2,081.5	13.1
Smokers .....	1,672	25.6	28,699.7	17.2
Debris Burning.....	1,364	20.9	24,180.3	17.7
Incendiary .....	2,678	41.0	54,987.1	20.5
Lumbering .....	161	2.5	3,611.6	22.4
Miscellaneous .....	350	5.3	3,969.2	11.3
Totals.....	6,532	100.0	119,149.2	18.2

TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1949-50	1950-51	1951-52	1952-53	1953-54	Average for 5-Year Period
Lightning .....	0.2	0.6	1.5	1.6	0.6	0.8
Railroads .....	2.8	2.3	3.1	1.3	1.7	2.3
Campers .....	2.5	2.7	2.3	2.8	2.4	2.6
Smokers .....	19.9	25.4	22.9	24.6	25.6	23.4
Debris Burning.....	18.0	19.1	19.5	19.6	20.9	19.3
Incendiary .....	48.2	38.6	41.5	38.6	41.0	42.1
Lumbering .....	1.7	1.5	2.0	1.9	2.5	1.9
Miscellaneous .....	4.9	7.4	7.2	9.6	5.3	6.6
Unknown .....	1.8	2.4	....	....	....	1.0



TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1953-54

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	22	104.2	.06	4.7
Aiken .....	450,200	253	2,633.8	.59	10.4
Allendale .....	131,400	102	1,150.0	.88	11.3
Anderson .....	173,700	46	359.8	.21	7.8
Bamberg .....	126,000	142	1,807.6	1.43	12.7
Barnwell .....	147,800	133	953.4	.65	7.2
Beaufort .....	188,400	72	3,089.5	1.64	42.9
Berkeley .....	398,974	367	5,640.7	1.41	15.4
Calhoun .....	123,500	61	557.5	.45	9.1
Charleston .....	271,994	153	3,560.8	1.31	23.3
Cherokee .....	127,800	38	396.1	.31	10.4
Chester .....	260,023	60	549.7	.21	9.2
Chesterfield .....	310,000	84	491.1	.16	5.8
Clarendon .....	228,500	263	5,589.3	2.45	21.3
Colleton .....	465,000	275	3,643.7	.78	13.2
Darlington .....	208,500	155	2,034.0	.98	13.1
Dillon .....	144,100	139	1,595.9	1.11	11.5
Dorchester .....	268,200	142	5,344.9	1.99	37.6
Edgefield .....	172,641	44	285.7	.17	6.5
Fairfield .....	338,957	82	868.4	.26	10.6
Florence .....	293,900	359	5,727.4	1.95	16.0
Georgetown .....	415,600	165	1,686.5	.41	10.2
Greenville .....	267,800	257	3,404.4	1.27	13.2
Greenwood .....	198,913	41	481.5	.24	11.7
Hampton .....	239,500	88	735.3	.31	8.4
Horry .....	557,600	398	23,442.8	4.20	58.9
Jasper .....	280,000	156	3,934.0	1.41	25.2
Kershaw .....	336,500	70	1,409.5	.42	20.1
Lancaster .....	199,400	73	640.3	.32	8.8
Laurens .....	244,735	25	137.0	.06	5.5
Lee .....	110,600	73	1,559.7	1.41	21.4
Lexington .....	291,500	138	619.3	.21	4.5
Marion .....	224,700	72	335.9	.15	4.7
Marlboro .....	150,600	232	5,402.3	3.59	23.3
McCormick .....	144,840	31	334.3	.23	10.8
Newberry .....	205,003	27	227.0	.11	8.4
Oconee .....	259,252	76	372.5	.14	4.9
Orangeburg .....	318,800	637	13,343.0	4.19	20.9
Pickens .....	190,100	52	141.3	.07	2.7
Richland .....	289,500	204	2,946.9	1.02	14.4
Saluda .....	149,956	35	230.9	.15	6.6
Spartanburg .....	208,300	86	891.4	.43	10.4
Sumter .....	205,400	204	6,171.2	3.00	30.3
Union .....	157,894	28	201.1	.13	7.2
Williamsburg .....	429,800	264	3,551.0	.83	13.5
York .....	226,300	108	566.6	.25	5.2
Totals.....	11,300,008	6,532	119,149.2	1.05	18.2

TABLE 9—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1949-50 .....	11,789,643	8424	240,504.3	2.13	28.5
1950-51 .....	11,300,008	6643	147,840.3	1.31	22.3
1951-52 .....	11,300,008	4982	108,450.1	.96	21.8
1952-53 .....	11,300,008	4928	78,193.8	.69	15.9
1953-54 .....	11,300,008	6532	119,149.2	1.05	18.2



TABLE 10—SEEDLING DISTRIBUTION BY LAND CLASSIFICATION

LAND OWNERSHIP	Loblolly	Slash	Longleaf	Arizona Cypress	*Red Cedar	*Other Species	Totals
Farms .....	6,522,400	5,029,925	208,325	14,050	44,050	†9,000 †10,700 **95,000	11,933,450
Associations and Clubs.....	59,200	233,300	500	.....	1,000	† 500	294,500
Schools .....	43,500	36,000	5,000	.....	500	† 250	85,250
State Forests .....	25,000	1,145,000	4,000	.....	.....	.....	1,174,000
Other State Lands.....	197,250	98,000	100	.....	.....	† 600 ** 2,000	297,950
Other Public Lines.....	45,000	9,000	2,000	200	200	.....	56,400
Other Small Owners.....	2,363,100	3,085,000	35,200	7,000	20,000	† 4,500 † 6,000	5,520,800
Forest Industries.....	7,652,400	5,687,500	10,500	.....	.....	†26,000 † 2,500	13,378,900
Other Industries.....	1,246,400	506,000	25,000	.....	.....	.....	1,777,400
Federal Lands.....	375,500	240,500	200,000	.....	.....	.....	816,000
Totals .....	18,529,750	16,070,225	490,625	21,250	65,750	157,050	35,334,650
Out-of-State .....	2,000	1,050,000	(less 176,550 exchanged with N. C.)				875,450
GRAND TOTALS.....	18,531,750	16,943,675	490,625	21,250	65,750	157,050	36,210,100

\*The Forestry Commission received 176,550 seedlings which are included in the above and were obtained from North Carolina in exchange for slash pine seedlings. These 176,550 seedlings are composed of the White pine, Yellow Poplar, Shortleaf and 19,500 Red Cedar seedlings. The amount shown in Out-of-State is the net shipped out of the state over that obtained on an exchange basis.

†Yellow pine.

‡White pine.

\*\*Shortleaf pine.

TABLE 11—1953-54 SEEDLING DISTRIBUTING COUNTIES—SPECIES—AMOUNTS

COUNTY	Loblolly	Slash	Longleaf	Arizona Cypress	*Red Cedar	*White Pine	*Yellow Poplar	*Shortleaf	Totals
Abbeville	490,150	17,000	.....	.....	.....	.....	.....	.....	507,150
Aiken	406,300	2,602,500	220,100	3,000	7,000	.....	.....	.....	3,237,900
Allendale	243,000	621,900	4,100	.....	.....	.....	.....	.....	869,000
Anderson	860,000	1,000	.....	.....	.....	.....	.....	.....	861,000
Bamberg	24,000	78,500	500	.....	.....	.....	.....	.....	103,000
Barnwell	146,500	822,000	3,000	.....	.....	.....	.....	.....	971,500
Beaufort	26,300	21,000	.....	.....	2,000	.....	.....	.....	49,300
Berkeley	290,000	173,500	.....	.....	1,000	500	.....	.....	465,000
Calhoun	72,000	302,000	3,500	250	.....	.....	.....	.....	377,750
Charleston	208,400	108,400	2,000	1,350	1,650	.....	2,000	.....	323,800
Cherokee	124,000	.....	.....	.....	.....	.....	.....	.....	124,000
Chester	613,770	5,000	6,000	.....	.....	.....	.....	.....	624,770
Chesterfield	102,500	781,000	2,000	.....	2,000	.....	.....	.....	887,500
Clarendon	75,000	247,000	5,000	2,000	1,000	.....	.....	.....	330,000
Colleton	774,200	185,950	3,000	1,200	1,800	.....	.....	.....	966,150
Darlington	150,000	140,500	.....	.....	2,000	.....	.....	.....	292,500
Dillon	58,000	196,500	9,500	.....	1,000	.....	.....	.....	265,000
Dorchester	1,093,000	312,000	1,000	.....	.....	.....	.....	.....	1,406,000
Edgefield	255,466	102,000	7,000	.....	.....	.....	.....	.....	364,466
Fairfield	646,118	.....	1,000	.....	.....	.....	.....	.....	647,118
Florence	117,700	44,250	14,550	.....	.....	.....	.....	.....	176,500
Georgetown	168,000	708,700	.....	.....	.....	1,500	.....	.....	876,700
Greenville	168,000	.....	.....	250	.....	.....	.....	.....	169,750
Greenwood	603,976	1,000	26,500	.....	500	.....	.....	.....	630,976
Hampton	426,000	610,200	500	.....	3,000	.....	.....	.....	1,039,700
Horry	78,000	1,163,500	1,000	1,000	1,000	.....	.....	.....	1,244,500
Jasper	248,000	1,408,600	22,500	.....	.....	.....	4,000	.....	1,683,100
Kershaw	682,000	2,268,500	5,000	1,500	500	.....	25,000	.....	2,982,500
Lancaster	1,481,500	38,000	5,500	.....	.....	.....	.....	.....	1,525,000
Laurens	853,318	1,000	3,000	500	500	.....	.....	.....	858,318
Lee	152,400	57,100	14,000	.....	1,000	.....	.....	.....	224,500
Lexington	193,000	490,000	46,500	2,000	8,500	1,000	.....	.....	741,000
Marion	17,000	47,500	.....	.....	.....	.....	.....	.....	64,500
Marlboro	111,500	117,500	8,000	.....	3,000	.....	1,000	.....	241,000
McCormick	608,500	52,500	.....	4,000	2,000	.....	.....	.....	667,000
Newberry	641,502	13,000	12,500	.....	.....	.....	250	.....	667,252
Oconee	305,750	2,475	625	.....	.....	5,100	.....	95,000	408,950
Orangeburg	562,000	338,250	5,350	.....	100	200	.....	.....	895,900
Pickens	538,500	.....	.....	.....	4,000	5,000	3,000	2,000	552,500
Richland	900,354	898,500	21,600	3,000	5,000	.....	1,000	.....	1,829,454





TABLE 12—S. C. STATE COMMISSION OF FORESTRY  
DIVISION OF STATE PARKS

Summary of State Park Use, July 1, 1953 - June 30, 1954

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Fish- ermen	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathroom Users	No. Out-of- State Cars	Total No. of Cars	Total No. of Visitors
Aiken .....	15	65	928	2,819	26,894	19,286	3,808	878	18,594	71,216
Barnwell .....	.....	.....	1,935	1,681	55,463	23,312	3,658	1,759	30,279	97,134
Campbells Pond (N).....	.....	.....	1,843	201	2,143	4,131	1,334	654	3,042	14,030
Cheraw .....	398	2,891	20,500	9,248	82,256	76,861	19,737	19,287	57,847	222,417
Chester .....	.....	.....	2,925	789	32,032	.....	56	2,719	15,979	71,200
Croft .....	.....	.....	.....	1,449	30,876	25,756	25,756	327	30,635	112,335
Edisto Beach.....	430	1,910	7,367	6,922	48,536	57,066	6,414	1,189	27,261	108,245
Givhans Ferry.....	161	1,042	50	702	27,811	10,934	822	653	11,882	48,058
Greenwood .....	.....	.....	3,820	3,615	63,965	11,375	.....	.....	37,150	142,140
Hunting Island.....	.....	.....	19,251	3,559	20,257	49,572	8,931	6,551	34,636	142,800
Hunting Island (N).....	.....	.....	591	577	3,948	5,821	1,440	1,372	6,004	24,500
Kings Mountain.....	.....	.....	1,248	10,154	80,700	26,600	5,958	49,938	74,537	170,327
Lee .....	1	4	1,331	769	18,605	15,834	4,027	261	15,445	61,462
Little Pee Dee.....	.....	.....	.....	731	15,822	216	2	359	8,046	25,514
Myrtle Beach.....	655	3,009	24,118	10,140	47,218	29,631	3,646	7,154	20,980	189,808
Oconee .....	1,173	6,894	42	4,597	48,362	31,120	6,803	939	24,210	145,172
Paris Mountain.....	.....	.....	.....	14,943	115,186	18,493	17,773	3,739	95,409	321,308
Picasant Ridge (N).....	.....	.....	.....	246	2,125	472	.....	101	1,125	5,100
Poinsett .....	215	1,515	1,044	4,951	63,104	36,764	18,861	2,994	33,035	151,700
Mill Creek .....	.....	.....	161	651	11,751	14,258	14,258	118	5,170	26,229
Rivers Bridge.....	.....	.....	1,014	901	19,160	13,379	8,832	497	15,657	47,100
Santee .....	.....	.....	1,275	3,823	45,959	29,318	6,624	777	17,571	107,230
Sesqui-Centennial .....	.....	.....	1,753	24,776	236,694	274,423	9,291	37,582	152,737	577,134
Table Rock.....	1,095	6,602	1,488	5,696	51,117	72,895	8,406	4,032	75,318	265,100
Colleton Wayside.....	.....	.....	.....	4,409	10,988	.....	136	5,971	11,745	59,835
Totals.....	4,143	23,932	92,684	118,439	1,160,882	847,517	176,573	149,854	824,294	3,207,094

(N) Negro Area.













From the mountains to the sea, the forests and state parks of South Carolina contribute to the economy and well-being of the state and its citizens.



STATE OF SOUTH CAROLINA

**REPORT**

OF THE

**STATE COMMISSION OF FORESTRY**

FOR THE YEAR

JULY 1, 1954 TO JUNE 30, 1955



**CHARLES H. FLORY, State Forester**  
**COLUMBIA, S. C.**

Printed Under the Direction of the  
State Budget and Control Board

## TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL .....	5
PERSONNEL .....	6
SUMMARY .....	13
Recommendations .....	16
FOREST MANAGEMENT .....	19
Management Assistance .....	19
Reforestation .....	25
Cooperative Forest Management .....	28
State Forests .....	28
Cassatt State Forest .....	29
Harbison State Forest .....	30
Manchester State Forest .....	30
Sand Hills State Forest .....	33
Experimental Studies .....	36
FOREST FIRE PROTECTION .....	39
Forest Area Protected .....	40
Forest Fire Protection Organization .....	41
Fire Protection Activities .....	43
Improvements, Tools and Equipment .....	48
Equipment .....	52
Equipment Maintenance Shop .....	53
Forest Fire Summary .....	55
STATE PARKS .....	59
Appropriations .....	60
State Park Areas .....	60
Vacation Cabins .....	61
Group Camps .....	63
Historical Areas .....	64
Report on the Capitol Improvements Program .....	65
Recommendations .....	69
Summary of State Park Facilities .....	71
INFORMATION AND EDUCATION .....	73
Forest Fire Prevention .....	74
Cooperative Forest Fire Prevention Campaign .....	78
School Programs .....	78
Forestry Demonstrations .....	80
Georgetown Timber Festival .....	80
Conservation Week and Arbor Day .....	80
Fire Prevention Roadside Signs .....	81
Motion Pictures .....	82
Vocational Agriculture School Forestry Program .....	83
Resource-Use Education .....	84
Talks and Exhibits .....	85
Radio and Television .....	87
Training .....	88
News Releases and Articles .....	89
Boys' Forestry Camp .....	89
Publications .....	90
Sign and Woodworking Shop .....	91
South Carolina Tree Farms System .....	91
ADMINISTRATION .....	95
Personnel Accident and Injury .....	95
Automotive Accidents .....	95
Commission Purchasing .....	95
Personnel .....	96
Training .....	96
APPENDIX .....	97



*To Honorable George Bell Timmerman, Jr., Governor, and to  
the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Acts of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1954 to June 30, 1955.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
Fulton B. Creech, *Chairman.*

## THE STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1955)  
*Members of the Commission*

Fulton B. Creech, Chairman, Sumter, S. C.  
 A. Leland Slade, Sr., Aiken, S. C.  
 Dr. R. F. Poole, President, Clemson College, Clemson, S. C.  
 A. B. Taylor, Spartanburg, S. C.  
 John C. Pracht, Greenwood, S. C.

*Secretary of the Commission*

Chas. H. Flory, State Forester

## DIVISION OF STATE PARKS

C. West Jacocks, State Park Director  
 T. D. Ravenel, Assistant State Park Director—Operations  
 E. R. Vreeland, Assistant State Park Director—Operations  
 Ralph W. Eckles, Head, Plans and Designs

*State Park Superintendents*

Aiken State Park, E. S. Gunter, Jr., Supt., Windsor, S. C.  
 Andrew Jackson Historical State Park, Cecil S. Hayes,  
 Ranger, Rt. 1, Lancaster, S. C.  
 Barnwell State Park, Mrs. D. I. Ross, Supt., Blackville, S. C.  
 \*Cheraw State Park, George T. Holder, Supt., Cheraw, S. C.  
 Chester State Park, Clarence Doster, Supt., Chester, S. C.  
 Croft State Park, J. E. Thornton, Ranger, Spartanburg, S. C.  
 Edisto Beach State Park, Donald B. Cooler, Supt., Edisto  
 Island, S. C.  
 Givhans Ferry State Park, Wm. Wiggins, Jr., Supt., Ridge-  
 ville, S. C.  
 \*Greenwood State Park, M. R. LeRoy, Supt., Ninety Six, S. C.  
 \*Hunting Island State Park, Robert G. Jones, Supt., Frogmore,  
 S. C.  
 Kings Mountain State Park, Raymond M. Sisk, Supt., Kings  
 Creek, S. C.  
 Lee State Park, Van W. Pressley, Supt., Bishopville, S. C.  
 Little Pee Dee State Park, LaFon Norton, Supt., Dillon, S. C.



Myrtle Beach State Park, Samuel H. Floyd, Supt., Myrtle Beach, S. C.

Oconee State Park, James W. Ray, Supt., Walhalla, S. C.

Paris Mountain State Park, Ed. H. Miller, Supt., Greenville, S. C.

\*Pleasant Ridge State Park, LeRoy Smith, Ranger, Cleveland, S. C.

\*Poinsett State Park, F. Marion Dwight, Supt., Wedgefield, S. C.

Rivers Bridge State Park, E. B. Mobley, Supt., Ehrhardt, S. C.

Santee State Park, G. B. LaBoon, Supt., Santee, S. C.

Sesqui-Centennial State Park, Marshall Holder, Supt., Columbia, S. C.

Table Rock State Park, E. W. Cooler, Jr., Supt., Pickens, S. C.

Colleton Wayside Park, Willard Risher, Caretaker, Canadys, S. C.

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\* Includes area for Negroes.

## **DIVISION OF FORESTRY**

### **Branch of Administration**

E. B. Price, Assistant State Forester

C. H. Nelson, Head, Fiscal and Accounting

Delford F. Furney, Head, Property and Supply

Virginia S. Holmes, Head, Personnel and Office Services

Warehouse, Sumter, S. C.

J. P. Watson, Warehouseman

### **Branch of Information and Education**

John C. Witherspoon, Assistant State Forester

Walter T. Ahearn, Information and Education Assistant

Nelson L. Peach, Information and Education Assistant

Sign and Woodworking Shop, Sumter, S. C.

Olin M. Ballentine, Foreman

### **Branch of Forest Management**

E. C. Pickens, Assistant State Forester

A. A. Lehocky, Management Assistant

Howard R. Scott, Management Assistant

Sand Hills State Forest, Patrick, S. C.

Randolph B. Lee, Director

Manchester State Forest, Wedgefield, S. C.

C. W. Nuite, Director

Horace L. Tilghman Nursery, Wedgefield, S. C.

L. M. Staley, Nurseryman

### **Branch of Forest Fire Control**

John R. Tiller, Assistant State Forester

W. J. Barton, Fire Control Assistant

John M. Shirer, Fire Control Assistant

John R. McLees, Fire Control Engineer

J. M. Geddings, Communications Engineer-Telephone

R. M. Littlejohn, Communications Engineer-Radio

Equipment and Repair Shop, Sumter, S. C.

O. P. Woodward, Supervising Mechanic



### District Offices

Hugh M. Westbury, District Forester, Orangeburg, S. C.

Chas. C. Rountree, Jr., Forester, Orangeburg, S. C.

John E. Graham, Forester, Aiken, S. C.

Adrian Lee Pardue, District Ranger, Aiken, S. C.

(Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington and Orangeburg)

Chauncey R. Nichols, District Forester, Camden, S. C.

Legare M. Duke, Forester, Camden, S. C.

Maurice D. Stucker, Forester, Camden, S. C.

W. O. Morgan, District Ranger, Camden, S. C.

(Camden District includes counties of: Chesterfield, Kershaw, Lancaster, Lee, Richland and Sumter)

Alvin E. Kunz, District Forester, Florence, S. C.

Wilbur H. Reames, Forester, Florence, S. C.

Robert N. McCombs, Forester, Florence, S. C.

C. Ray Anderson, District Ranger, Florence, S. C.

(Florence District includes counties of: Darlington, Dillon, Florence, Horry, Marion and Marlboro)

William M. Lindsey, District Forester, Kingstree, S. C.

Fred W. Horn, Forester, Kingstree, S. C.

Marvin T. Gaffney, Forester, Kingstree, S. C.

John R. Grubbs, District Ranger, Kingstree, S. C.

(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown and Williamsburg)

E. L. Middleswart, District Forester, Newberry, S. C.

Harry Avedisian, Assistant Forester, Newberry, S. C.

Robert G. Reyns, Forester, Greenwood, S. C.

Clifton T. Carter, Timber Marker, Chester, S. C.

Melton Wall, District Ranger, Newberry, S. C.

(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

J. T. Hance, District Forester, Spartanburg, S. C.

Ralph W. Evans, Forester, Pickens, S. C.

J. Harlan McLees, Forester, Spartanburg, S. C.

Claude F. Barden, Forester, Spartanburg, S. C.

Paul C. Bowie, District Ranger, Spartanburg, S. C.

(Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

Boris Hurlbutt, District Forester, Walterboro, S. C.

Archie C. Craft, Jr., Forester, Walterboro, S. C.

Warren L. Brown, Forester, Walterboro, S. C.

Joseph W. Goldman, District Ranger, Walterboro, S. C.

(Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton and Jasper)

### PROTECTION UNITS

Abbeville Unit Ranger, Charlie Shaw, Lowndesville, S. C.

Aiken Unit Ranger, J. Ramie Yonce, Aiken, S. C.

Allendale Unit Ranger, W. W. Brunson, Allendale, S. C.

Anderson Unit Ranger, John E. Embler, Anderson, S. C.

Bamberg Unit Ranger, P. H. Cave, Olar, S. C.

Barnwell Unit Ranger, W. R. Moore (EOD 11-9-54) Barnwell, S. C.

Beaufort Unit Ranger, R. W. Wisner, Beaufort, S. C.

Berkeley Unit Ranger, Harold McCoy, Bonneau, S. C.

Calhoun Unit Ranger, Hampie F. Ott, St. Matthews, S. C.

Charleston Unit Ranger, K. W. Leland, Charleston, S. C.

Cherokee Unit Ranger, B. T. White, Gaffney, S. C.

Chester Unit Ranger, J. Gill Simpson, Chester, S. C.

Chesterfield Unit Ranger, W. M. Smith, Chesterfield, S. C.

Clarendon Unit Ranger, Elliott E. Rose, Manning, S. C.

Colleton Unit Ranger, E. H. Benton, Walterboro, S. C.

Darlington Unit Ranger, Alton Yarborough, Darlington, S. C.

Dillon Unit Ranger, Ernest S. Oliver, Dillon, S. C.

Dorchester Unit Ranger, Carlisle Haskell Durr, St. George, S. C.

Edgefield Unit Ranger, S. G. Reel, Edgefield, S. C.

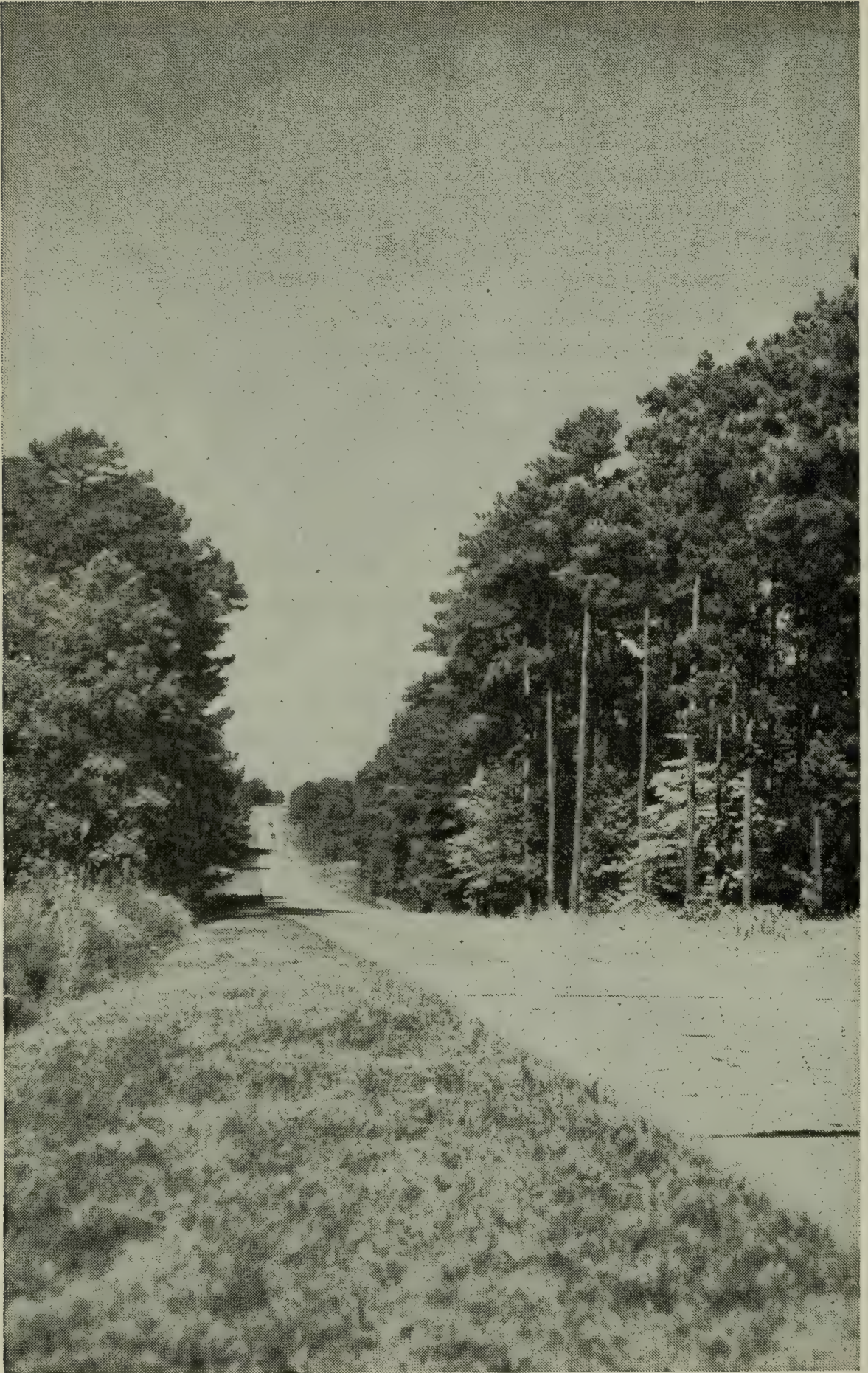
Fairfield Unit Ranger, R. E. Patrick, Winnsboro, S. C.

Florence Unit Ranger, Hugh Cusaac, Florence, S. C.



Georgetown Unit Ranger, Laurin T. Sessions, Georgetown, S. C.  
Greenville Unit Ranger, G. G. Paris, Greenville, S. C.  
Greenwood Unit Ranger, James C. Smith, Jr., Greenwood, S. C.  
Hampton Unit Ranger, J. D. Peeples, Early Branch, S. C.  
Horry Unit Ranger, W. E. Watts, Conway, S. C.  
Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland, S. C.  
Kershaw Unit Ranger, L. E. Smith, Camden, S. C.  
Lancaster Unit Ranger, A. A. Plyler, Lancaster, S. C.  
Laurens Unit Ranger, H. E. Martin, Laurens, S. C.  
Lee Unit Ranger, E. A. Hall, Bishopville, S. C.  
Lexington Unit Ranger, V. S. Bickley, Lexington, S. C.  
Marion Unit Ranger, Hoyt Collins, Marion, S. C.  
Marlboro Unit Ranger, B. T. Clark, Bennettsville, S. C.  
McCormick Unit Ranger, G. L. Sharpton, McCormick, S. C.  
Newberry Unit Ranger, Marvin E. Wilson, Newberry, S. C.  
Oconee Unit Ranger, D. O. Morgan, Walhalla, S. C.  
Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg, S. C.  
Pickens Unit Ranger, C. H. Gravely, Pickens, S. C.  
Richland Unit Ranger, T. W. Cooper, Columbia, S. C.  
Saluda Unit Ranger, Steve Shaw Rushton, Saluda, S. C.  
Spartanburg Unit Ranger, Charles E. Turpin, Spartanburg, S. C.  
Sumter Unit Ranger, L. G. Cubbage, Sumter, S. C.  
Union Unit Ranger, James G. Long, Union, S. C.  
Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree, S. C.  
York Unit Ranger, E. G. Foster, York, S. C.





Forests grow on 6 out of every 10 acres of land in South Carolina. The major functions of the S. C. State Commission of Forestry are: assisting private woodland owners in protecting their forest lands from fire, in developing and managing their woodlands and in harvesting and marketing their forest products; and establishing, developing, and operating a system of state parks.



# SUMMARY

## FOREST MANAGEMENT

As in the past, the major emphasis of the Commission of Forestry's management program was directed towards assisting the small, private, woodland owners with their forest management problems. This is as it should be, since approximately 73% of the woodland area of the State is owned by more than 105,000 small owners. The larger industrial ownerships control approximately 20% and all types of public ownership control 7%. Most of the State and Federal ownerships are being managed properly, and the majority of the other public land managers, principally municipal, etc., are becoming interested and are obtaining the services of private or public foresters to help with their forest management problems. The small owner still constitutes the greatest problem and needs the most help.

During the year the Commission's foresters made woodland examinations on 1,166 separate woodland areas, covering approximately 184,754 acres. A total of 13,875,377 board feet of sawtimber was marked and 5,162 cords of pulpwood were marked. Commission foresters assisted many more landowners in getting a private or industrial forester to selectively mark sawtimber or pulpwood.

The average prices received for selectively marked sawtimber and pulpwood by landowners continues to be considerably above that for sawtimber or pulpwood sold on a boundary or diameter limit basis. This is particularly true where no estimate of the amount to be sold is made when boundary or diameter limit sales are used.

The Commission's Horace L. Tilghman Nursery at Wedgefield, S. C., produced 34,723,000 seedlings for South Carolina landowners in 1954-1955. This was the second highest production on record for the Commission of Forestry. In addition, orders for 5 million trees, in excess of the amount produced, were received.

Plans are underway to expand nursery production to at least 38 million seedlings, and possibly up to 50 million per year. Even so, some 40 to 50 years will be required to catch up on the planting needs in the State. There are almost one and one-half

million acres of idle or un-productive land that will require planting before it will become productive.

The four (4) State Forests operated by the Commission represent only 1% of the forest land in the State. These forests are operated as proving grounds for forestry techniques and as demonstration areas. They were badly cut over and understocked when acquired, and the major activity has been to increase their growing potential and bring all areas into production. These forests are rapidly becoming self-sustaining and in a few years should return a profit to the State, above operational costs. Another major activity on the State Forest lands is the conversion of worthless scrub oak lands back to production of pine. The rate of this conversion is about 400 acres per year.

### INFORMATION AND EDUCATION

The information and education approach to forestry and state park problems and opportunities in South Carolina is the sum total of many people and many activities. It is a ranger or a warden talking to a landowner, to a class of school children, or to a volunteer offering help on a going woods fire. It is a district forester meeting with local citizens about the woods fire problem in their community, or conducting a tree planting demonstration for those ordering trees for the first time. It is a forester conducting a timber thinning demonstration in the woods with a class of vocational agriculture students, or presenting a program on conservation at a garden club or civic club meeting. It is a towerman talking to a visitor, explaining the fundamentals of forest fire prevention and forest fire control activities. It is a state park superintendent operating an area of a thousand acres or more and serving as host to ten thousand people on a hot summer day, or helping a school teacher unfold the mysteries of a nature trail to a group of children. It is a landowner understanding that one tree should be cut because it is overmature, while its neighbor should be left because it is growing wood at the rate of six to sixteen percent return on his investment. It is any South Carolinian realizing that even a little fire kills little trees, regardless of why or how the fire started.

Yes, forestry and state park information and activities involve many things and many people. Press releases, photographs,



pamphlets, talks, field demonstrations, films, radio and television are some of the tools used in carrying out the mandate of the Commission to keep the people of South Carolina informed on forestry and state park matters.

Well-informed South Carolinians who are made aware of the seriousness of the problems that face our state in the fields of state parks and the conservation of our natural resources will realize that by taking positive action, these problems can be turned into opportunities.

As South Carolinians, as individuals, realize that each of us has some stake and responsibility in the present and future of our forests and state parks, we find that there are things every one of us can do to turn these problems into opportunities for us, our families, our children, our community, and our State.

### **Forest Fire Protection:**

The fiscal year covered by this report, 1954-55, was characterized by longer periods of critical fire weather than any of record with the Commission of Forestry. This is evidenced by the fact that more than 7,000 forest fires were fought by the fire control organization during the year, these fires burning nearly 160,000 acres of woodland. This was a thousand more fires and 37,000 more acres burned than the average for the past five years.

Such a record clearly indicates an urgent need for an intensified fire control program, particularly in the field of fire prevention education and intensification of medium and heavy tractor-plow fire suppression units, in order to reduce the average annual area burned to 0.5% of the area protected, or 55,000 acres. Such a goal is considered necessary to economical forest operations by our landowners.

It appears necessary that the Commission of Forestry readjust its plans, organization and equipment, as well as its needs, from time to time in order to give it the ability to perform the job prescribed by changing conditions. Studies of such necessary readjustments and desirable intensification in the fire control program are planned during the next fiscal year.

## State Parks

The importance of the service rendered South Carolina by its system of 22 state parks can be visualized by the fact that again in the 1954-55 fiscal year over three million visitors used them for health, relaxation, and recreation. Attendance has increased six-fold in the past 10 years, and has exceeded three million for the past three years.

During the year new facilities were added to all the parks as a result of the \$300,000 bond issue and park visitors were greeted with more improvements than in any previous operating year.

The need for adequate maintenance of these increased facilities is evident in the light of the conservation of human resources. Mental health and stability of families are direct results of wholesome outdoor recreation in the naturalistic setting of South Carolina's State Parks. With increased leisure on the one hand, and the tension of our times on the other, State Park values cannot be reckoned in dollars and cents.

Improved and additional facilities for Negroes are needed for more equitable service to our people.

## Administration:

The Commission of Forestry because of financial inability to adjust inequality in individual's salaries and to give merit increases, continued to lose both technical and other personnel. A total of 70 employees resigned during the year, of which 63% were county personnel.

The Commission budgeted and spent on all phases of the Forestry and Park Program \$2,243,334.32, and of this total the Division of Forestry expended \$1,468,968.03 and the Division of State Parks \$774,366.29. (See financial sheet for detailed explanation of funds available and expenditures made.) State appropriated funds amounted to \$1,086,542.00 for the Division of Forestry and \$338,329.00 for the Division of State Parks.

## Recommendations:

(1) An intensified forest fire prevention program designed to reduce fire occurrence to a minimum.



(2) Additional heavy power equipment, hand tools, and completion of the radio communications system to further intensify forest fire suppression and reduce excessive losses; strengthening existing fire laws.

(3) Adequate maintenance of existing capital improvements, equipment and tools.

(4) Make provisions to increase tree seedling production to approximately 50 million trees annually.

(5) Intensify the Commission's over-all educational program to: develop a public awareness of the need for forest conservation; prevent forest fires from occurring; encourage intelligent timber harvesting to yield a greater production per acre per year; and encourage the planting of idle land to trees. Such a program of informing the people of the state would also help guard against insect and disease attack. It would acquaint landowners with ways to eliminate weed species of trees to permit better yields of higher valued products. It would teach a more intelligent use of state park facilities to the end that people would enjoy and appreciate the natural beauty and resources of South Carolina and become conservation-minded citizens.

(6) Provide by law for detection and control of forest insects and diseases.

(7) Provide for an intensified program of forest research.

(8) Rehabilitate the four state owned and leased demonstration forest areas to bring them into full production without further delay.

(9) Adequate operations and facilities for the existing state parks to keep pace with the greatly increased public use.

(10) Provide adequate state park facilities for Negroes.

(11) Provide adequate salaries and wages for personnel to assure continued employment and a stable organization of competent employees.





Hardwood trees and pine trees grow fast in South Carolina. Last year Commission foresters assisted more than 1,000 landowners in handling their woodlands for maximum production and profit.



# FOREST MANAGEMENT

## Management Assistance:

The major emphasis of the Forest Management Branch activities was again directed towards assisting private landowners with their woodland management problems.

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing foresters to help landowners manage their timber lands.

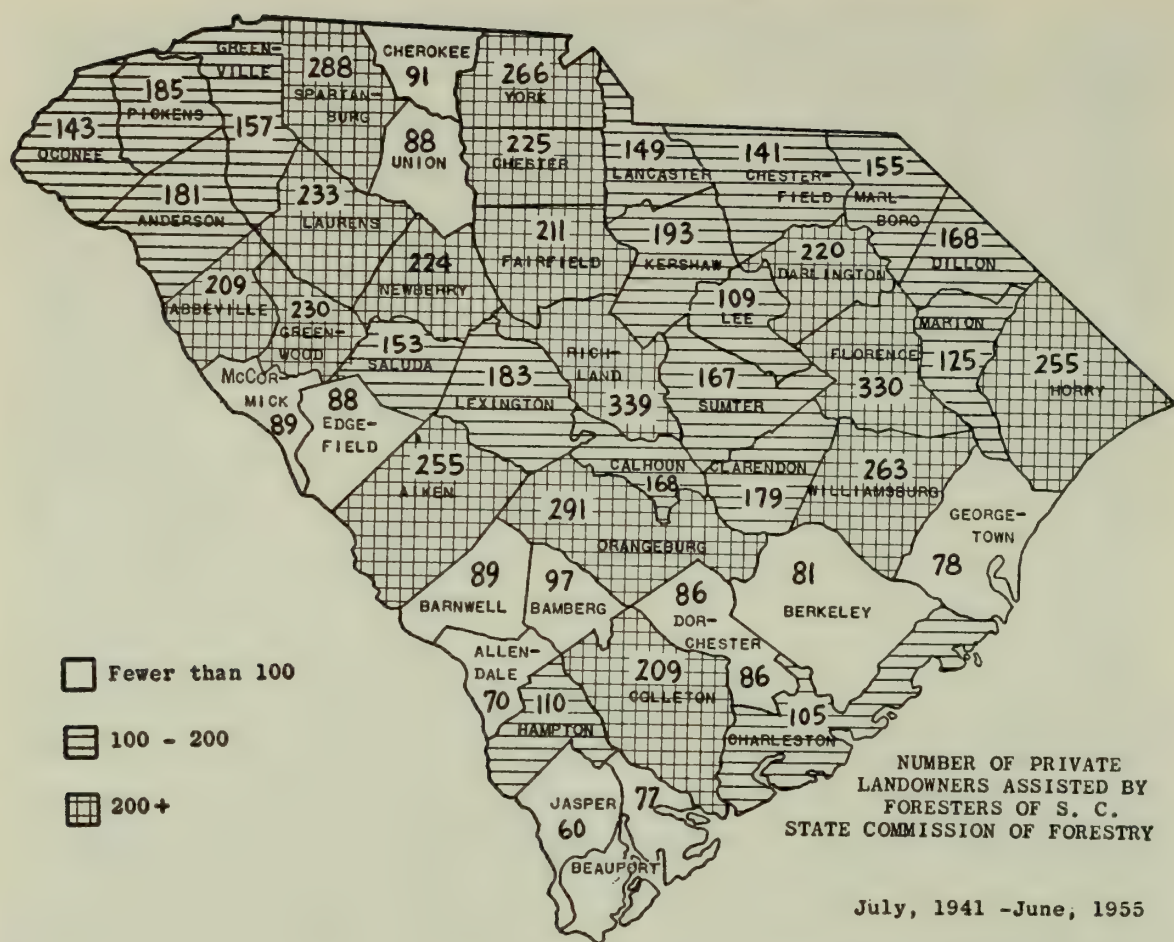
Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, and reforestation measures needed.

In cases where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a sample timber sale agreement. The charge for this service is fifty cents per thousand board-feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a distinctly technical measure and involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day, and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seed bed preparation, and control of the "Brown Spot" disease in longleaf pine. Recommendations for the use of prescribed fire are made only after a very careful analysis, with the landowners, of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

During the year Commission Foresters made 1,166 woodland examinations on 184,754 acres of forest land, and selectively marked a total of 13,875,377 board feet and 5,162.0 cords for 399 landowners on 9,477 acres of forest land. The following table shows the continuous increase in woodland examination and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature.

Commission Foresters and Extension Foresters again followed the policy of referring all of the larger jobs and some of the



TOTAL NUMBER OF LANDOWNERS ASSISTED: 7813

smaller jobs to consulting and industry foresters wherever practical. Our records indicate 83 jobs referred to consulting foresters where properties were examined by Commission or Extension Foresters and it is estimated that at least as many more jobs were referred direct to consulting foresters where original contact was made by Commission or Extension personnel.

SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
1950-51 .....	998	173,057	339	14,275	19,634,153	3,896
1951-52 .....	919	170,948	288	11,931	18,031,822	3,088.6
1952-53 .....	931	142,054	315	12,109	16,332,715	3,935
1953-54 .....	945	143,347	331	8,864	12,264,641	8,467
1954-55 .....	1,166	184,754	399	9,477	13,875,377	5,162
TOTALS.....	8,628	1,785,783	3,010	177,654	238,919,468	43,342.2



Prices received from marked sawtimber for the past five years are shown in the following table:

### TIMBER SALES SUMMARY FOR SOUTH CAROLINA 5 YEAR PERIOD

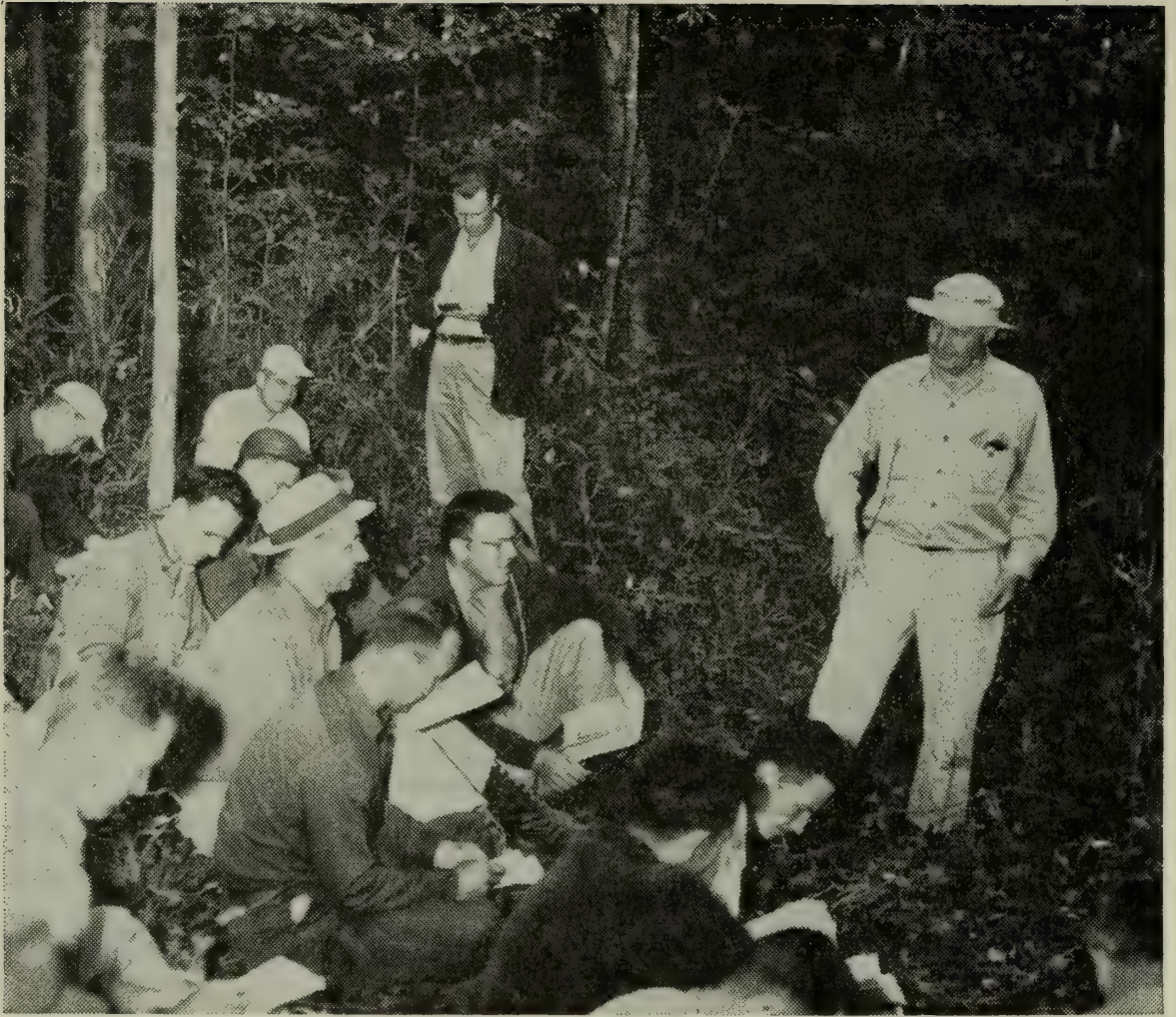
Fiscal Year	No. Sales on Record	Weighted Average Price Received Per M Bd. Ft.
1950-51-----	138	30.76
1951-52-----	114	33.02
1952-53-----	100	35.53
1953-54-----	54	31.53
1954-55-----	86	32.50

Timber prices strengthened a little during the first six months of this fiscal year, and remained good throughout the year. Demand for low-grade timber was not equal to the 1949-51 demand for this same quality. High quality timber continued to sell very well, and brought premium prices. The average price for marked timber continued to bring a better price per thousand than did "lump sum" or "boundary sales."

Pulpwood prices remained steady with some increase in production occurring in the upper Piedmont and Mountain counties. Pole prices remained about the same.

The annual Forest Management Training School was held April 25-28, at Burnt Gin Group Camp in Sumter County. The major emphasis this year was placed on training in the management of hardwood species. Mr. J. A. Putnam and H. R. Tomlinson of the U. S. Forest Service were visiting instructors. Mr. Putnam is probably the nation's leading expert on management and production of hardwood timber. In addition to the hardwood management instruction, some general problems were discussed and all Commission foresters given a chance to talk about their problems.





J. A. Putnam, "Mr. Hardwood" was main instructor at annual Forest Management Training School to bring Commission foresters up-to-date in techniques of managing hardwood timber.

### LUMBER AND PULPWOOD PRODUCTION BY YEARS

1942	1,079,351 M bd. ft.	946,000 Cords
1943	984,773 M bd. ft.	985,000 Cords
1944	850,748 M bd. ft.	1,053,500 Cords
1945	723,667 M bd. ft.	877,500 Cords
1946	1,005,700 M bd. ft.	955,700 Cords
1947	871,014 M bd. ft.	948,388 Cords
1948	798,700 M bd. ft.	1,108,523 Cords
1949	1,002,000 M bd. ft.	1,012,180 Cords
1950	997,000 M bd. ft.	1,182,413 Cords
1951	1,100,000 M bd. ft.	1,251,045 Cords
1952	958,000 M bd. ft.	1,275,698 Cords
1953	921,000 M bd. ft.	1,446,157 Cords
1954	950,000 M bd. ft. est.	1,330,888 Cords





Lumber and pulpwood are the main components of South Carolina's forest products industry—the state's second largest industry.



The production of sawtimber was not up to 1949-51 levels. There was probably some increase over 1953. The production of pulpwood did not quite match the record 1953 production. Until new pulpwood industries locate within the State, the annual demand for pulpwood will probably remain at about one and one-half million cords per year. The volume production of pulpwood from the Mountain and Upper Piedmont counties increased two and three times during the past year.

It is becoming increasingly difficult for the sawmill operators to find large, high quality, logs. The average size log being milled is continuing to decrease. The Forestry Commission's private landowner assistance program is designed to help grow larger and better quality poles and sawtimber through selective cutting practices. In the long run, the production of the larger, high quality, products is more profitable both to the landowner and the operator.

There was very little change during the year in the number of forest products industries operating in the State. Some small sawmill operators dropped out and others began, apparently about holding even.

The forest industries that possess their own land in the State continued to show considerable interest in handling their company-owned woodlands properly. Many of the companies who do not hire full-time foresters avail themselves of professional assistance by using part-time consultants, Commission or Extension foresters.

The pulp companies who obtain wood from South Carolina through their Conservation Departments continued to mark pulpwood for thinning on private property. According to reports received from these companies approximately one-third of the total cut of pulpwood in South Carolina is taken from thinnings and tops left from sawtimber operations. Approximately one-third of the remaining cut is from operations where minimum seed trees are left, leaving less than 40% of the pulpwood cut being taken from clear cutting operations.

Again Commission Foresters answered approximately 500 requests to check trees for insect damage. This is in addition to answering a large number of requests by telephone, where no field check was necessary.



Three large areas were hit hard by hail early in the year. Commission Foresters kept a close watch on these areas and assisted landowners with salvage and control operations. Sufficient rain and some salvage cutting has held damage to a minimum.

Continued checking was done for oak wilt, with no cases found in South Carolina. Some increase in *Ips* beetle activity was noted early during the year; however, no epidemic occurred and average rains during the summer helped hold the increase in activity to about normal.

### REFORESTATION

A total of 34,723,025 seedlings were produced and distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly Pine.....	17,258,975
Slash Pine.....	16,716,550
Longleaf Pine.....	573,050
Arizona Cypress.....	127,950
Red Cedar.....	23,000
Shortleaf Pine.....	23,500

In addition to the above, 500,000 Slash and 150,000 Loblolly were secured from Georgia, 80,800 Red Cedar from North Carolina, 15,100 Shortleaf Pine from North Carolina, 71,100 Yellow Poplar from North Carolina, and 1,000 White Pine from North Carolina. The Grand Total planted in South Carolina was 35,373,025 seedlings. An exchange was made with North Carolina for these trees. Two hundred fifty thousand Slash pine were exchanged with North Carolina. The Slash pine from Georgia was a direct purchase.

The production of trees at the Nursery was again about 4,000,000 in excess of the average that should annually be produced with present facilities. Good weather early in the year (March, April, May) and less mortality from grubs, weeds, etc., added up to the over-production. Soil building practices again demonstrated their value. Some soil building practices had to be left off late in the year, since extra funds had to be spent to lift and pack 4 million trees over that budgeted.

Orders for the entire production of trees were received prior to the beginning of shipping (December). Orders for more than 5,000,000 trees were turned down.

Tables 10 and 11 in the Appendix show a record of seedlings distributed by counties and class of ownership. The following table shows the number of seedlings planted in South Carolina by years.

1928-29 .....	142,000
1929-30 .....	148,000
1930-31 .....	986,000
1931-32 .....	976,000
1932-33 .....	996,000
1933-34 .....	1,031,000
1934-35 .....	7,529,000
1935-36 .....	23,000,000
1936-37 .....	22,000,000
1937-38 .....	11,192,000
1938-39 .....	10,854,000
1939-40 .....	12,244,000
1940-41 .....	21,165,423
1941-42 .....	10,275,037
1942-43 .....	4,742,010
1943-44 .....	5,662,608
1944-45 .....	1,926,840
1945-46 .....	6,402,255
1946-47 .....	1,962,600
1947-48 .....	11,356,990
1948-49 .....	30,338,775
1949-50 .....	29,501,955
1950-51 .....	20,615,315
1951-52 .....	16,619,000
1952-53 .....	22,035,850
1953-54 .....	36,210,100
1954-55 .....	35,373,025
<hr/>	
TOTAL .....	345,285,783

This was the eighth year of nursery operations at Wedgefield. During this time the nursery has produced and distributed 207,895,010 seedlings, not counting a small amount of miscel-



laneous stock grown for experimental purposes. The average annual production was 25,986,876 seedlings. The production costs for the entire eight years, including a complete write-off of all equipment and permanent improvements is \$2.61 per thousand trees produced. Present facilities and land are being expanded beginning July 1, 1955, in an effort to increase average annual production to 34-38 million trees. No work could be started on this expansion this fiscal year.



Nurseryman Larry Staley shows group of teachers operations at the Commission's Horace L. Tilghman Forest Tree Nursery.

There are a number of "bottlenecks" to overcome before production can be materially increased. The most important ones to overcome are adequate seed collection and soil maintenance programs. The distribution problem is rapidly becoming more important as the separation of seed by source and custom growing trees for some planters increase.

The seed problem may be alleviated by some of the larger tree planters furnishing their own seed. The soil building problem is being attended to; however, it requires at least one year and sometimes two to build up land sufficiently to grow trees. It will be December 1958, before trees are ready for distribution from land that is made ready in 1956-57.



About 40 acres of land at the nursery was planted to cover crops and had sawdust and fertilizer applied.

The following amount of cones were collected by Commission personnel: 4,870 bushels of Slash pine; 1,382.5 bushels, Longleaf pine; 4,718 bushels, Loblolly pine; 10 bushels, Shortleaf pine; 1 bushel, Virginia pine; and 503 pounds, Red Cedar fruit. In addition, West Virginia Pulp & Paper Company delivered 868 bushels of Loblolly pine cones, from which 955 pounds of seed were extracted. West Va. Co. also furnished 291 pounds of Superior Grade Loblolly seed and 44 pounds of Special Slash pine seed. Forty-five hundred pounds of Slash pine seed were purchased from the Southern Seed Company, Baldwin, Georgia. One year's supply of Slash and Longleaf seed is on hand; however, only one-fourth of the annual requirements for Loblolly pine is on hand. At least 12,000 bushels of cones must be collected annually, augmented by direct purchasing of two to three thousand pounds of Slash pine seed in order to maintain sufficient seed on hand.

### **COOPERATIVE FOREST MANAGEMENT**

During the fiscal year nine cooperative forest management projects were operated in the state. A summary of work accomplished by C. F. M. Foresters is included with the data for each district.

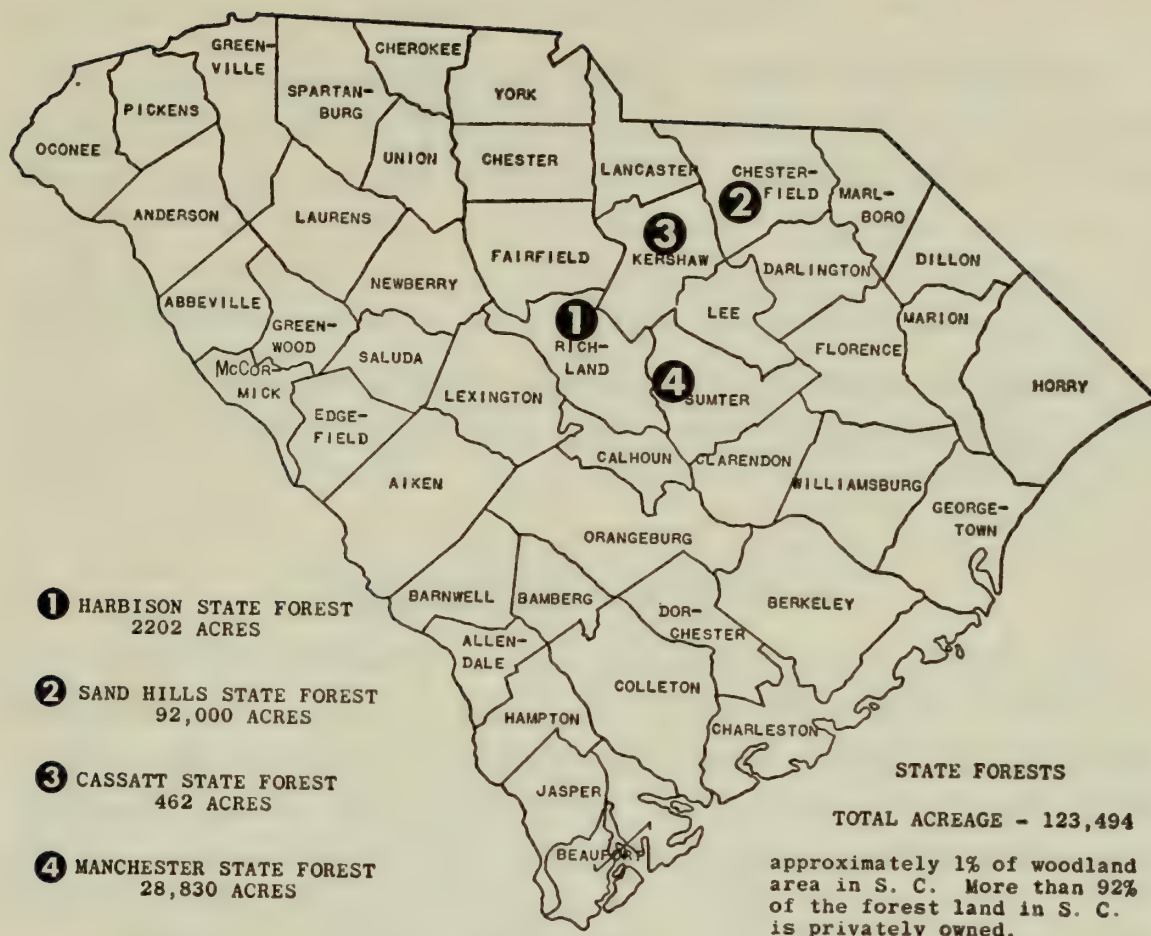
### **STATE FORESTS**

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

1. Cassatt State Forest—462 acres
2. Harbison State Forest—2,202 acres
3. Manchester State Forest—28,830 acres
4. Sand Hills State Forest—92,000 acres

Prior to acquisition by the state most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed towards building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.





The primary silvicultural objective is the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops in order to reduce the competition so that pine will survive and grow. Approximately 2,300 acres of scrub oak lands have been cleared and replanted to pine through fiscal year 1954-55.

Detailed reports of activities on each of the State Forests follow:

### **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres composed primarily of scrub oak land and abandoned fields. Thirty-four thousand Slash pine seedlings were planted in abandoned fields on this property in 1953-54, which completes the planting of old abandoned fields; however some replanting will be necessary. Future plans include the clearing of the remaining scrub oak lands on the forest and planting to pine.

Personnel from the Sand Hills State Forest did the tree planting and also maintained boundary firebreaks on the Cassatt State Forest.

## **HARBISON STATE FOREST**

Harbison State Forest, containing 2,202 acres is located in Richland County. The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the Caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year. Approximately seven miles of firebreaks were maintained by Manchester State Forest personnel and equipment.

No timber sales or other cutting was done during 1954-55. A substantial sale for thinning and improvement cutting is planned for 1955-56.

## **MANCHESTER STATE FOREST**

The 28,830 acres of land making up Manchester State Forest is located south of Wedgefield in Sumter County. This land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state, effective June 28, 1955. Immediate action is being taken to establish boundary lines, record title and plat, and to get all records of transfer completed.

More than one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak and reclaiming it for pine production.

### **Fire Protection:**

Only six fires occurred which burned 65.2 acres during the year. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining the area in the prevention, presuppression and suppression of forest fires. This fire record is one of the best ever posted for Manchester State Forest.

Approximately 360 miles of firebreaks were maintained during the year.



**Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. A detailed report on these two camps will be found in the Parks Division section of this report.

**Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

**Agriculture:**

Forty-four tenants rented 1,415 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, 428 acres of newly cleared scrub oak land was rented for one season to watermelon growers.

**Road and Truck Trails:**

During the year 40 miles of truck trails were machined and washes filled, a number of bridges repaired and diversion ditches cleaned.

**Management Plan:**

The Management Plan and Stand Description Maps made for this forest in 1947 have been revised and brought up-to-date. Plans are almost complete for the periodic thinning of planted pine stands that are now approaching pulpwood size. Thinning these planted stands for pulpwood was started in 1953-54. Saw-timber sales will be made from areas where the timber is reaching maturity.

**Tree Planting:**

A total of 477,000 trees were planted on the forest during the year. These included 442,000 Slash pine, 5,000 Loblolly pine and

20,000 Longleaf pine, 5,000 Red Cedar, and 5,000 Shortleaf pine. Of the above, 400 acres were machine planted in the brush-cut and cleared areas, and the remaining trees were planted in old fields.

### **Forest Products Sold:**

Forest products sold during the year included the following:

Sawtimber (board feet) .....	365,818
Pulpwood (cords) .....	970

### **Telephone Lines:**

Twenty-seven miles of telephone lines in the forest system were brushed and maintained during the year. A number of breaks were repaired and general maintenance carried out to keep the telephone system in good working order. One-half mile of new line was constructed to the mechanic's residence in Melrose House.

### **Silvicultural Practices:**

The primary silvicultural activity was the reclaiming of scrub oak areas. Five hundred twenty-five acres were brush-cut, using the Marden Duplex Brush-cutter; following which the area was cleared of debris and plowed with the Athens Disc Plow.

One hundred twenty acres of young pine plantations were released by removing the scrub oak overstory with the "Bush Hog."

Data on other experiments already underway are being kept which include thinning experiments in young pine stands, prescribe burning treatments, and elimination of undesirable hardwood.

### **Maintenance and Repair:**

A large number of small maintenance jobs were completed on tenant houses and headquarters buildings. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair.



Considerable repair work was completed on the automotive and tractor equipment. At least one large truck and one pickup should be traded within the next year. Also, one light tractor should be traded.

#### **Shaw Air Force Base Lease:**

The U. S. Army Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until June 30, 1962. The State Forestry Commission will be paid \$3,074 per year for this lease.

### **SAND HILLS STATE FOREST**

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease agreement.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. More than half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultural objective at present.

#### **Tree Planting:**

All planting was done by machine except some experimental planting. Four hundred twenty-two thousand seedlings were planted in clearings, and 27,000 in old fields. Almost all of the old fields on this forest are planted except those that are being farmed. Sand Hills State Forest personnel also planted 20,000 longleaf pine on Cassatt State Forest as replants and for experimental purposes.

### **Forest Products Harvested:**

The following products were harvested from the Sand Hill State Forest during the year:

Pulpwood..... 969 cords

Cutting will be stepped up as the young pine stands reach thinning size and age.

### **Fire Protection:**

During the year 28 fires burned 1,983.8 acres. This is only one-third of the average annual loss since the forest was established in 1939. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield Unit Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, presuppression and suppression of forest fires.

A total of 110 miles of firebreaks were plowed on the forest.

### **Recreation:**

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees are also held there. The lake is open to fishing, but no swimming is allowed.

The Parks Division continued improvement work on Campbell's Pond, Negro State Park. This area received heavy use during the year. A more detailed report will be found in the Park Section of this report.

### **Fish and Wildlife:**

No hunting was allowed on the area during the year. Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Moun-



tain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

### **Agricultural Lands:**

Seventeen tenants rent and farm 1,100 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

During the past four years more than 650 acres of land have been rented to watermelon growers following the clearing of scrub oak from the area. Present plans are to continue to clear scrub oak lands and rent them one year to watermelon growers and then plant them to pine.

### **Roads and Truck Trails:**

During the year 65 miles of truck trails were graded, brushed out, and washes filled in. Five culverts were repaired and five timber bridges redecked. Thirty-five diversion ditches were cleaned out.

### **Silvicultural Practices:**

A total of 170 acres of scrub oak was cleared with the brush cutter and plowed with the Athens Plow.

A number of experimental plots have been established using various poisons and concentrations in an effort to determine the most practical method of eliminating scrub oak competition so that pine can become established.

Records were maintained on thinning plots established in 1950.

### **Maintenance and Repair:**

The Sugar Loaf Mountain Recreation Area was maintained and all facilities in the area are in very good condition. The general condition of headquarters and director's residence is good; however, a number of the tenant houses are in need of considerable maintenance work.

### **Boundary Surveying:**

A Casdastral Engineer was sent by the Atlanta office of the U. S. Fish & Wildlife Service to continue work on boundary surveys for the forest; however, there are many more miles yet to be run to completely establish our boundaries. This surveying was done on an area where there was some dispute about the location of the Sand Hills State Forest lines.

### **Experimental Studies:**

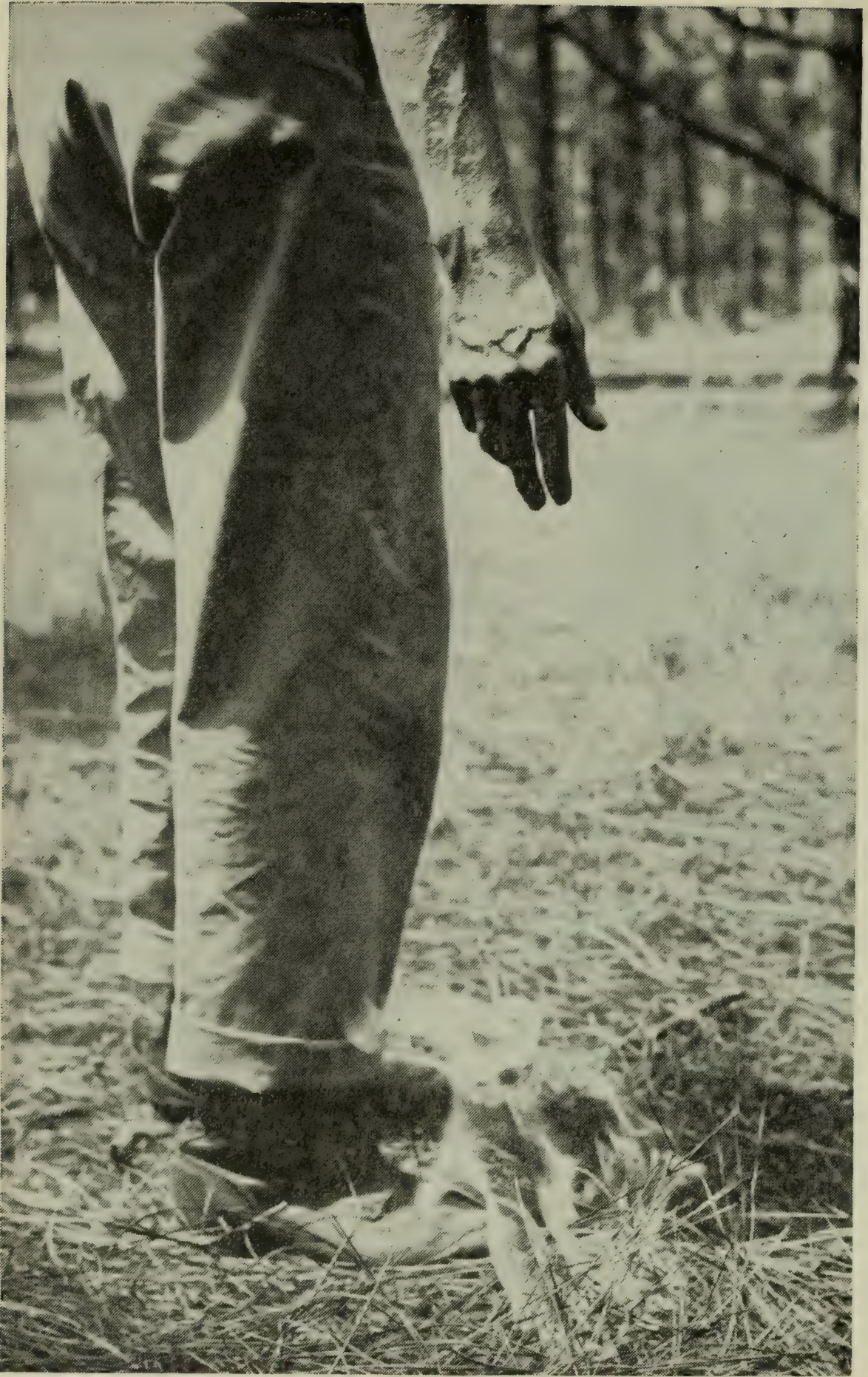
In cooperation with the Santee Branch, Southeastern Forest Experiment Station, several experimental studies have been set up aiming toward the development of nursery and planting practices needed to insure survival and early growth of planted longleaf pine in the scrub oak areas of the Sand Hills Regions of the state. This work is being done on both the Sand Hills State Forest and the Manchester State Forest. Many of these experiments were set up during 1953-54 and were continued over to this year.

The studies include:

1. Tests of nursery treatments involving fertilizer, seedling stand density, and root pruning for development of drought-hardy longleaf pine seedlings.
2. Effect of seedling grade, seedling treatment and season of planting upon early survival of longleaf pine.
3. In typical planting localities tests of longleaf pine stock from local seed sources as to survival, growth rate and other characteristics which may effect suitability for planting.
4. Determination of the effect of various degrees or treatment of scrub oak cover on soil moistures and longleaf pine survival.
5. Tests by seedling grades the effect of root length upon survival of longleaf pine.
6. Comparison of older longleaf pine seedling stock (2-0), transplant stock (1-1), and regular planting stock (1-0) as to survival and early growth.



7. Tests of the effect of season of application in chemical treatments to control scrub oak in longleaf pine planting sites.
8. Tests of species suitable for Sandhill planting on cleared land.
9. Effect of furrowing depth, clearing, and poisoning scrub oak on longleaf pine survival.



Each year the State Commission of Forestry fights more than 6,000 woods fires. 99% are caused by people.



## FOREST FIRE PROTECTION

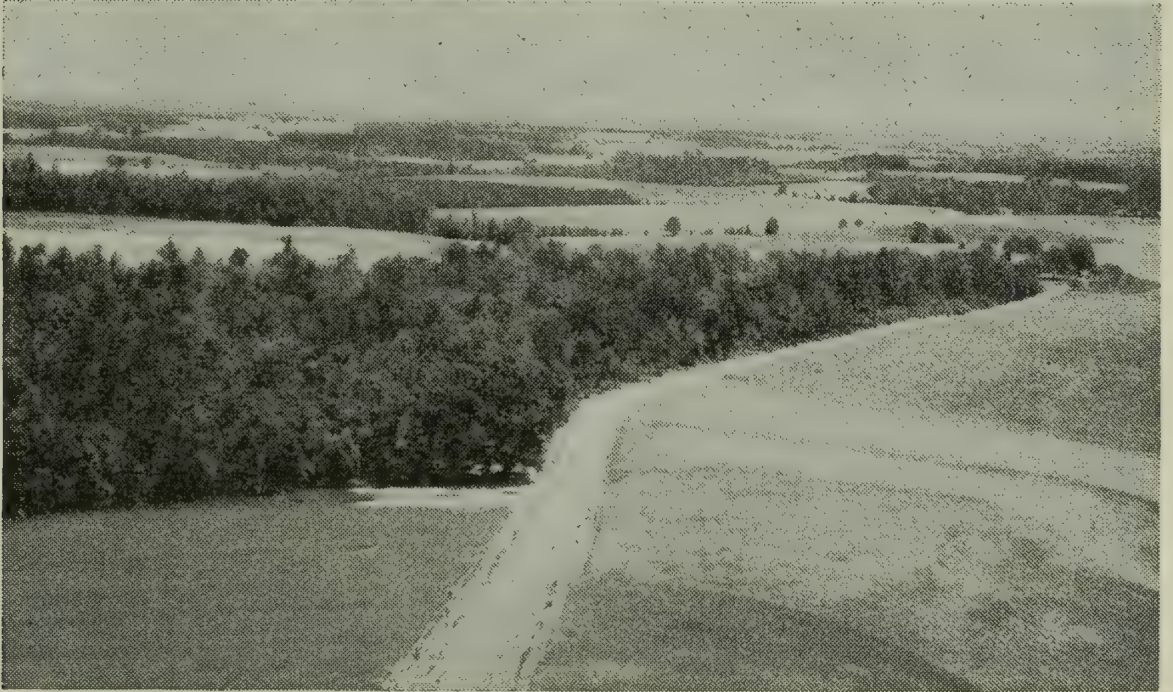
The fiscal year 1954-55 was characterized by longer periods of critical forest fire weather than any of record with the S. C. State Commission of Forestry. Bringing over seven inches deficiency in rainfall from the preceding fiscal year, the forest fire control organization began the fiscal year 1954-55 controlling and mopping up the big 10,200-acre Myrtle Beach fire which, for two weeks, burned above and below ground, requiring more men, equipment and materials for suppression and doing more damage than any other single fire recorded by the Commission of Forestry. With the exception of January, the fiscal year through the middle of May was critically dry, with high winds increasing the hazard for long periods. The fiscal year 1954-55 ended with 9.6 inches deficiency in rainfall for the year. These conditions greatly increased the possibility of fires occurring with the result that 1,000 more fires were fought by the organization during the year than the average number annually handled for the past five-year period. During a two weeks' period in March alone, the fire organization, supported by landowners and other volunteers, fought more than 1,000 fires. Despite the fact that the total area burned during the fiscal year, 159,000 acres, was not excessive based on number of fires which occurred, the total loss resulting from the fires is considered excessive, representing losses in wealth and resources that our landowners, the industry and State can ill afford.

It is apparent that, at this point, we are no closer to reaching our announced goal of 2,500 fires and 55,000 acres burned annually. It is further apparent that we must now reconsider our estimates of 1950 as to what it will take in the way of personnel, tools, equipment, improvements and forest fire prevention education to reach such a goal. At the close of the fiscal year, a Forest Fire Problem Study Committee, the result of a Joint Resolution passed by the 1955 General Assembly, had been appointed to study the entire complex forest fire problem in South Carolina and to report its findings and recommendations to the 1956 General Assembly. In addition, in 1955-56, there has been scheduled by the U. S. Forest Service and the several state forestry agencies a nation-wide re-study of esti-



mates, by states, of forest area needing protection and cost to do the job. Both of these studies should be thorough and, based on past experience, should include recommendations for intensification where necessary to reach our goal of reduced fire occurrence and area burned within a reasonable length of time.

While there is much to be done to improve our fire protection program, the following pages describe in some detail the Commission's fire control organization and its activities and accomplishments during the fiscal year 1954-55.



More than 11 million acres of state and privately-owned forest lands in South Carolina are protected by the S. C. State Commission of Forestry.

### **FOREST AREA PROTECTED**

The total forest area of state and privately-owned lands in South Carolina comprises 11,300,008 acres. Of this total, approximately 169,574 acres are state-owned parks and forests. Intensive forest fire protection is furnished to all forest landowners on a cooperative basis whereby the private landowners cooperate with the State Commission of Forestry in the prevention and control of fires on their timberlands. In addition to the above total, the U. S. Forest Service protects a total of 587,361 acres within national forest boundaries. Some 58,100 acres are owned and protected by other federal agencies. These federal holdings are administered and protected by the various U. S. Government branches and are not incorporated with the overall state forest fire protection program or statistics.



## FOREST FIRE PROTECTION ORGANIZATION

All forest fire protection activities within the state are supervised by the Fire Control Branch of the State Commission of Forestry with headquarters at Columbia. The State is subdivided into seven forest service districts with a district forester at each district headquarters who is responsible for all forest fire protection activities within his district.

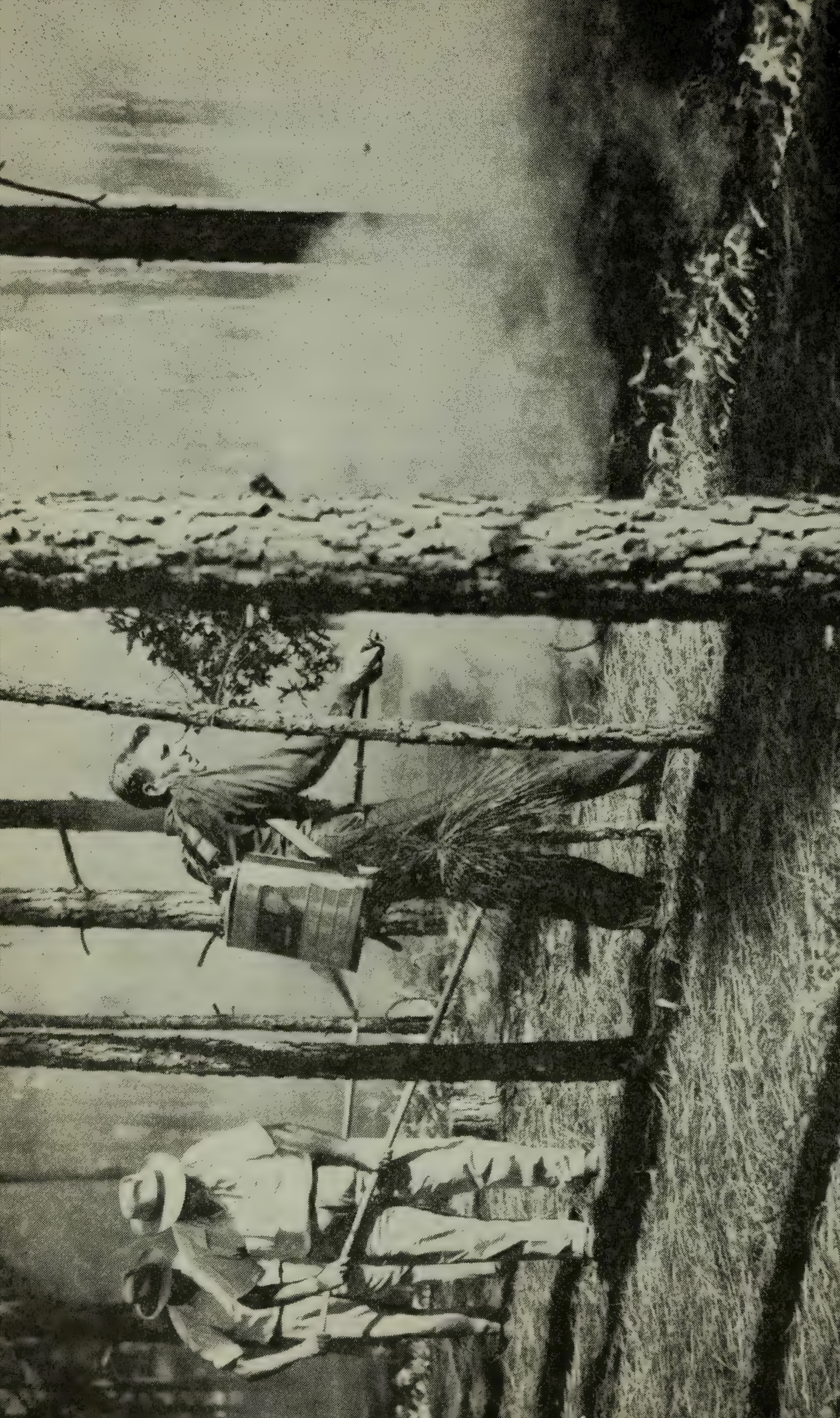
Forest fire protection work in each county unit is provided by the individual rangers who are responsible to the district forester. The regular county unit organization consists, in addition to the unit ranger, of unit wardens, towermen, tractor operators, and flexible crews, all of which function as a group in furnishing forest fire protection on a cooperative basis to landowners within the county.

Unit personnel employed throughout the state consist of 46 rangers, 133 wardens, 50 tractor operators, and 137 towermen. In addition to these regular full-time employees, 28,598 individuals volunteered their services to the regular unit organization and actually assisted with the suppression of illegal forest fires throughout the state. Considering the fact that 7,022 illegal fires occurred during the fiscal year, this volunteer assistance averaged 4.1 persons per fire, constituting far better response by the public than ever before attained. The response of private landowners, tenants, and other volunteers as outlined above indicates that generally the people throughout the state are aware of the tremendous losses inflicted by forest fires and are interested in an effective forest fire control program which will reduce these annual losses to a minimum. Even though Commission personnel render assistance on going fires wherever and whenever possible, the individual landowners are not relieved of the responsibility of wild fires on their property and, in fact, must accept the basic responsibility for both preventing and suppressing fires on their properties.

### State Forests and Parks:

The individual State Forest Directors and State Park Superintendents are directly responsible for the prevention and control of woods fires on these state-owned lands. However, the Branch of Fire Control cooperates very closely in rendering







forest fire protection assistance. All of the State Parks and Forests are furnished with a detailed fire protection plan similar to the individual county unit fire plans. These fire plans outline the procedure for both prevention and suppression activities on the state-owned areas.

### **Cooperative Agreements with U. S. Forest Service:**

The U. S. Forest Service and the Commission of Forestry have mutually agreed to assist one another with the detection and suppression of fires which occur along either side of the national forest boundaries. Further, the Commission of Forestry has agreed to furnish protection to certain areas within the national forest boundaries in those localities, where most of the land is privately owned. In other areas within national forest boundaries, where the majority of the property is federally owned, the U. S. Forestry Service assumes responsibility for protection of certain areas which normally would fall under the responsibility of the Commission of Forestry. These agreements greatly increase the overall efficiency of the suppression efforts of both organizations. In both cases, however, the private landowners must assist in the prevention and control of forest fires.

## **FIRE PROTECTION ACTIVITIES**

### **Training:**

During the year, the Forestry Commission continued to improve its fire control training program. Emphasis was placed on intensive unit and individual training. As contrasted to the past, training is now a continuous activity carried on all year long. Unit rangers, district and Columbia personnel strive at all times to find weak phases and methodically correct them through individual or unit training, whichever is appropriate. Fire weather permitting, at least one day each week is devoted to improvement by training. It is felt that considerable progress has been made.

A number of equipment training sessions were scheduled throughout the state to familiarize operators with correct methods of operating and maintaining mechanized fire control equipment.

Plans are already underway to improve and strengthen training during fiscal year 1955-56.

**Inspection:**

The purpose of the unit inspection program is to determine the overall efficiency of the unit organizations. Each county in the state is inspected annually on all phases of fire control activity. The inspections were conducted by district office personnel and central office personnel. After the inspection, a detailed report is prepared outlining the condition of the unit and pointing out methods of improvement.

In addition to regular unit inspections, periodic motor vehicle inspections are made by all supervisory personnel. These inspections assure that all fire control equipment is kept in as good a state of repair as funds permit.

**Fire Plans:**

Numerous private landowners throughout the state have been furnished with a detailed forest fire protection plan which outlines the procedure to be followed in maintaining adequate fire protection on their holdings. The private plans follow the same general outline as the regular county unit fire plans which have been in use for a number of years. In the preparation of the private landowner plans, an attempt is made to stress the responsibility of the individual as a timberland owner and to coordinate his protection efforts with those of the Commission of Forestry. Commission personnel work very closely with the private landowners in organizing and equipping his fire crews, outlining suggestions of construction and maintenance of fire breaks, and many other details which should be initiated to accomplish the overall objective.

In addition to the county fire plans, a state-wide master fire plan has been prepared through which personnel and equipment of all counties in the state may be used to strengthen the fire control effort in any particular section of the state where, due to critical fire weather and excessive fire occurrence, the local fire control organization is unable to handle the situation.





Burning permit and burning notification laws were in effect in 8 counties during the year.

#### Law Enforcement:

All illegal fires are investigated as thoroughly as possible by unit and district personnel in an effort to determine the responsibility of the fire. Enforcement of the state fire laws is carried out in all cases where sufficient evidence is secured. A total of 260 persons were prosecuted for allowing fire to escape to lands of another. Of this total, 241 persons were convicted.

The burning permit law or the burning notification law, now in force in eight counties, requires all persons to secure a permit from, or notify, the county fire control organization or an authorized agent prior to burning brush, hedgerows, woodlands or fields during the period October 15-May 15 of each year. The counties which operated under the law during the year were Aiken, Orangeburg, Greenville, Georgetown, Charleston, Marlboro, Horry and Colleton.

**Forestry Legislation:**

During the 1955 session of the General Assembly, the Legislature passed a Joint Resolution providing for the appointment of a committee to study the forest fire problems of the state and report to the General Assembly at the 1956 session. The nine-man committee consists of two members of the Senate appointed by the President of the Senate; two members of the House of Representatives appointed by the Speaker of the House; and five members appointed by the Governor, one each from citizens representing the following interests: forest land ownership, forest industries, county forestry boards, Forestry Committee of the S. C. Bankers Association, and the Conservation Committee of the State Chamber of Commerce. The Committee will make a complete study of forest fire problems in the State, consisting of, but not limited to, the following: forest fire occurrence, causes, area burned, damages, etc., both illegal and legal fires. The Committee will further study the adequacy of fire prevention, detection, reporting, suppression and law enforcement, and will make such finding of facts as the circumstances warrant with suitable recommendations for prevention and control of fire in the forests of the State.

Also, during the 1955 session, the Legislature passed an act authorizing the Governor, upon recommendation of the State Forester, to issue a proclamation forbidding the use of fire on or adjacent to forests, woodlands, brushlands, or grasslands under protection from forest fires.

Notification or burning permit laws were passed for Hampton, Clarendon, and Williamsburg Counties during the year and these laws will go into effect on October 15, 1955.

**Southern States Fire Control Conference:**

The Southern States Fire Control Chiefs met jointly with the Information and Education Chiefs, Radio Engineers and State Foresters at Gatlinburg, Tennessee, in June of this year. The coordinated efforts of all of the administrative personnel from the various southern states were directed toward the improvement of the overall fire protection program throughout the South.



### **Interstate Forest Fire Protection Compact:**

During the 1954 session of the South Carolina General Assembly, an act was passed which provided that South Carolina may enter into a compact with any one or more of the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, Virginia and West Virginia, to provide effective prevention and control of forest fires in the Southeastern Region of the United States.

Implementation of the Compact calls for the development of integrated forest fire plans, the maintenance of adequate forest fire fighting services by the member states, provision for mutual aid in fighting forest fires among the compacting states of the region and with states which are parties to other regional forest fire protection compacts, and for more adequate forest protection.

The Act was approved by the Governor on March 26, 1954. The Congressional Consent Act, required to validate the State Acts, was still pending at the end of the fiscal year.

An organizational meeting was held in Atlanta, Georgia, in October, 1954. The compact organization was formally named the "Southeastern States Forest Fire Compact Commission." The membership of the Commission is comprised of the State Forester and a four-man Advisory Committee of each state. The governing body is an executive committee elected annually by the membership. The Executive Committee named to serve for the 1954-55 period consisted of Charles H. Flory, State Forester of South Carolina, Chairman; Harrod B. Newland, Director, Kentucky Division of Forestry, Vice-Chairman; James W. Craig, State Forester of Mississippi, Secretary; John Sheffield, State House of Representatives, Georgia, Member; and Walter J. Phillips, State House of Representatives, Mississippi, Member.

The compact became operative when the States of South Carolina and Georgia, being contiguous, ratified the Compact. Other states which have ratified the Compact are Florida, Kentucky, Mississippi, North Carolina, Tennessee, and West Virginia. Alabama and Virginia are expected to ratify in the next year.

In addition to the Compact, under which any one of the states may call upon any other state or states for aid in combating forest fires, several contiguous states have entered into "Memo-

randa of Understanding Requesting Continuous Mutual Aid in Suppression of Forest Fires Adjacent to State Boundaries." Such agreements have been made by and between South Carolina and North Carolina, South Carolina and Georgia, and North Carolina and Georgia.

Continued implementation of the Compact is scheduled during the 1955-56 fiscal year.

## **(IMPROVEMENTS, TOOLS AND EQUIPMENT**

### **Lookout Towers:**

Of the 157 lookout towers in South Carolina, 136 are owned and operated by the Commission. Twelve of these towers are constructed of treated wood. The wooden towers must be replaced by modern steel structures as they have just about reached their safety limit. It was necessary during this year to completely shut down operations on one of the wooden towers until very intensive and costly repairs could be made.

### **Tower Unit Buildings:**

The towersite improvements program ceased in 1948. There are 23 sites that are not provided with dwellings and outbuildings that are necessary to properly maintain lookout personnel.

Progress in maintaining existing dwellings and outbuildings is not satisfactory. Labor is available, but there are not sufficient funds available for materials and supplies.

### **Telephone Lines:**

During the fiscal year 1954-55 the telephone system was maintained in good operating condition by personnel of the Commission. This was accomplished by clearing right-of-way of trees and underbrush which endangers the proper operation of the lines, by making pole, bracket and insulator replacements as necessary and by prompt clearance of transmission troubles which developed on the lines.

Approximately 215.0 miles of telephone lines which had become surplus to the needs of the Commission, because of replacement by two-way radio, were salvaged during the year.

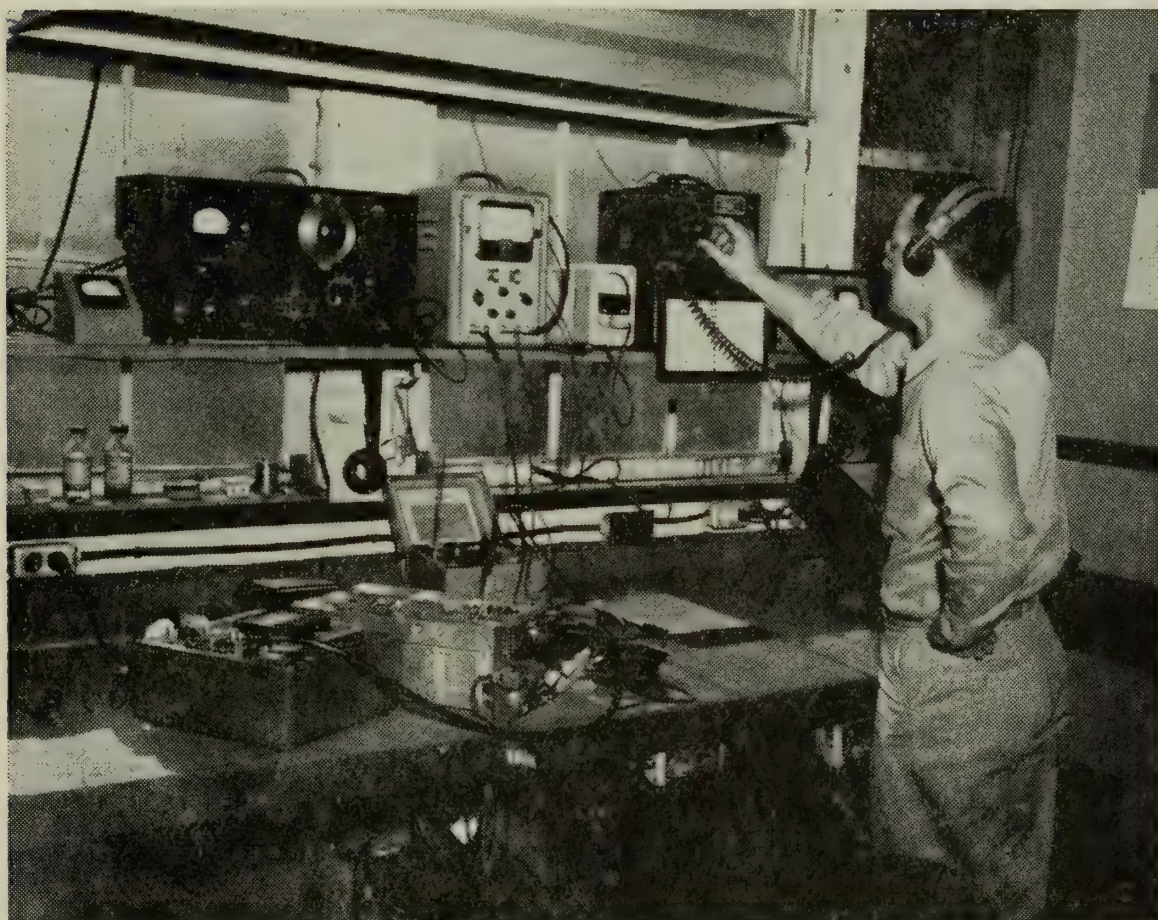
In order to further expand the Commission's radio system, approximately 261.0 miles of standing line structure, approximately



2,700 salvaged poles and approximately 8.0 circuit miles of salvaged wire were sold during the year. Radios were purchased with receipts from the sale of line and materials and were installed in stations and vehicles affected by the sales. The use of receipts from telephone line and materials sales for the purchase of two-way radio was authorized by the General Assembly several years ago as a means of expanding the Commission radio system.

At the end of the fiscal year, the Commission is still operating a telephone system consisting of 978.0 miles of line.

The practice of selling telephone lines will be continued in the future in order to further expand the radio system.



Commission radio technicians install, repair, and maintain the mobile and stationary radio units used in forest fire control work.

### Radio:

The radio program during the 1954-55 fiscal year consisted primarily of installing the equipment purchased last year with Civil Defense matching funds.

This installation schedule was aided by the employment of two additional radio technicians, making a total of five technicians now employed in radio. They have also carried on a continuous maintenance program on existing equipment during the year.

On June 30, 1955 the following radio equipment was in operation:

180 Base Station Units  
260 Mobile Units  
108 Auxiliary Receivers

A principal objective is to complete the installation of radios on the tractors, this arrangement permitting one radio to be operated either from the tractor or its transport truck.

#### **Use of Aircraft in Fire Control:**

Limited use was made for the fifth consecutive year of aircraft in forest fire control work. The airplane has proved to be an important means to supplement the lookout towers, especially during periods when the visibility from the towers is poor.

Sixty flights, totaling 254 hours, were flown during fiscal year 1954-55. This represented about one-fourth of the use that should have been made. There were many times that this type service was requested, but could not be made available because of the cost involved.

On one day alone, more than thirty fires that could not be seen from towers were spotted and reported in a five-hour flight.

During one particularly bad fire condition, two planes equipped with radio were kept aloft almost continuously for nine days.

Based on experience gained in this state, as well as in the other states, when aircraft is widely used, it is recommended that air patrol work be used to a larger extent.

#### **Fire Danger Measurement:**

The activities of all fire control personnel are governed entirely by the daily information received from the forest fire





Forest fire danger measurement stations in each county govern the activities of Commission personnel and aid in fire control work.

danger measurement stations which are located within each county. On days of low fire danger, district and unit personnel carry out fire prevention and other activities which may require that they be out of contact for some time. On days of moderate and high fire danger, all personnel maintain close contact with their dispatcher and are available for immediate fire calls. Average records for the state indicate the following number of class fire days for each of the five major ratings: 83 Class No. 1 days, 126 Class No. 2 days, 123 Class No. 3 days, 32 Class No. 4 days, and 1 Class No. 5 day.

## ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

Items	Value
134 Lookout Tower Units.....	\$2,942,503
1177 Miles Truck Trails.....	1,415,230
46 Fire Danger Measurement Stations.....	3,450
978 Miles Telephone Line.....	293,400
Radio: 8 Remote Control Base Stations, 60 watt.....@ \$1200	\$ 9,600
1 Remote Control Base Station, 60 watt.....@ \$1800	1,800
1 Remote Control Base Station, 250 watt.....@ \$2500	2,500
25 50 watt Base Station Units.....@ \$ 900	22,500
155 10, 25 and 30 watt Base Sta- tion Units.....@ \$ 535	82,925
260 10, 25 and 30 watt Mobile Units .....@ \$ 425	110,500
108 Auxiliary Receivers.....@ \$ 240	25,920
	<hr/> 255,745
TOTAL .....	<hr/> \$4,910,328

## EQUIPMENT

Five (5) additional light crawler tractors equipped with fire plows and truck transports were purchased during the year and assigned to areas not previously equipped.

Seven (7) ranger pickup trucks were replaced and seven (7) ten-year-old wheel-type tractors were replaced with light crawler-type tractors equipped with up-to-date fire plows.

Five (5) old wheel-type tractors were replaced with new wheel-type tractors. These tractors are assigned to counties where the soil is very sandy.

Two (2) new panel trucks were purchased for two (2) new radio technicians and one (1) new panel truck replaced an old panel truck assigned to a radio technician.

Replacement of fire control vehicles is not keeping pace with obsolescence, due to allotment of funds for that purpose.



# INVENTORY FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1955

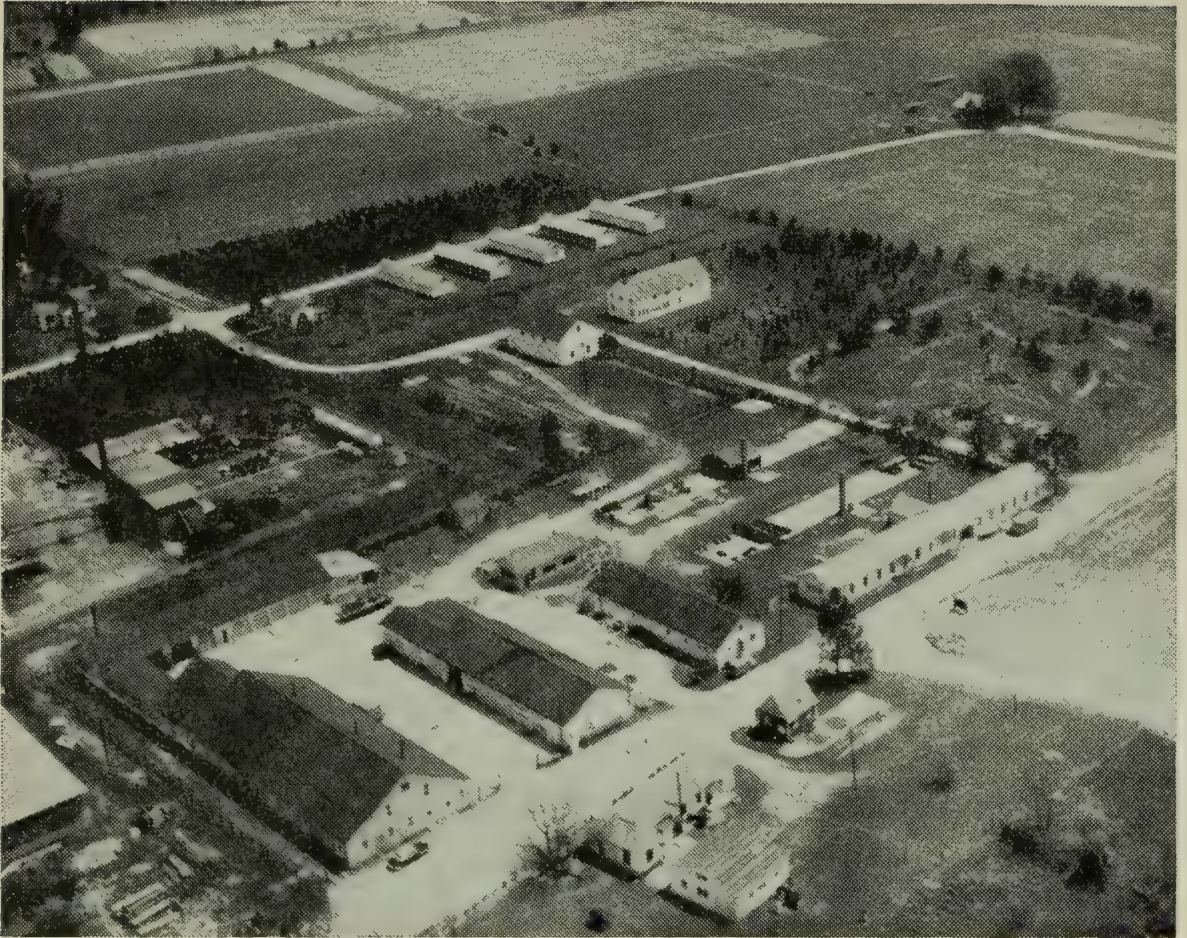
<i>Items</i>	<i>Values</i>
2613 Back Pack Pumps.....	\$ 36,582
4714 Fire Rakes.....	12,963
2740 Fire Swatters.....	7,809
4 Heavy Crawler Tractors.....	32,000
1 Medium Crawler Tractor.....	7,200
26 Light Crawler Tractors.....	59,800
21 Light Tractors w/Track System.....	44,100
10 Heavy Duty Fire Plows.....	8,000
1 Medium Duty Fire Plow.....	450
45 Light Duty Fire Plows.....	13,500
1 ¼ Ton Jeep w/Fire Plow.....	1,850
45 Light Equipment Transport Trucks.....	99,000
5 Truck Tractors, HD.....	16,000
6 Transport Trailers.....	15,000
47 Ranger Pickup Trucks.....	98,230
7 Sedan Delivery Trucks.....	13,300
1 1½ Ton Stakebody Truck.....	1,900
3 ½ Ton Pickup Trucks.....	4,500
1 300 Gallon Tanker Trailer w/Pump.....	1,200
1 Mobile Radio Trailer w/Power Plant.....	2,500
<b>TOTAL.....</b>	<b>\$ 475,884</b>

## Equipment Maintenance Shop:

The Fire Control Branch operates a central repair shop at Sumter where heavy and specialized repairs are made to all fire control equipment.

A very intensive preventive maintenance program is in effect for all trucks and tractors. Three (3) traveling mechanics, headquartering at the Sumter Shop, make periodic inspections, in the field, of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator, make such repairs as they are equipped to do on the spot.





View of Commission's Sumter shops. Here the Fire Control branch operates a central repair shop where heavy and specialized repairs are made to fire control equipment. Cone drying barns, woodworking and sign shop, and Commission warehouses are other facilities here.

Repairs that cannot be handled in the field by traveling mechanics are either referred to a local shop or sent to the Commission shop at Sumter, whichever is considered most economical.

All equipment maintenance men assist in frequent training sessions held during the year in the field.

A lot of the repair work is of a highly specialized nature and, for that reason, cannot be handled practically in commercial shops.

Below is listed some of the work handled during the fiscal year at the Sumter Shop:



<i>Repairs to</i>	<i>No. Jobs</i>
Light tractors .....	134
Heavy tractors .....	15
Light trucks .....	50
Heavy trucks .....	41
Light plows .....	25
Heavy plows .....	5
Light trailers .....	1
Heavy trailers .....	3
Total number of complete field inspections to equipment.....	365
Total number of field repairs to equipment by trav. mech. ....	366
Total number of installations of fire fighting equip. in new trucks .....	11

### Special Jobs:

#### 1. Manufactured:

- (a) 5 special bodies for heavy trucks
- (b) 100 holders for back fire torches
- (c) 13 screen racks weather stations
- (d) 19 housings for emergency generators (radio)
- (e) 1 tanker trailer w/pump
- (f) 1 mobile radio trailer
- (g) 15 radio boxes for tractors

#### 2. Constructed:

- (a) 1 140 radio mast Walterboro
- (b) 1 140 radio mast Kingstree
- (c) 1 pumper unit for State Park
- (d) 1 platform on Johns Island Tower for television-detector

#### 3. Handled:

- (a) 16 tractor training meetings

## FOREST FIRE SUMMARY

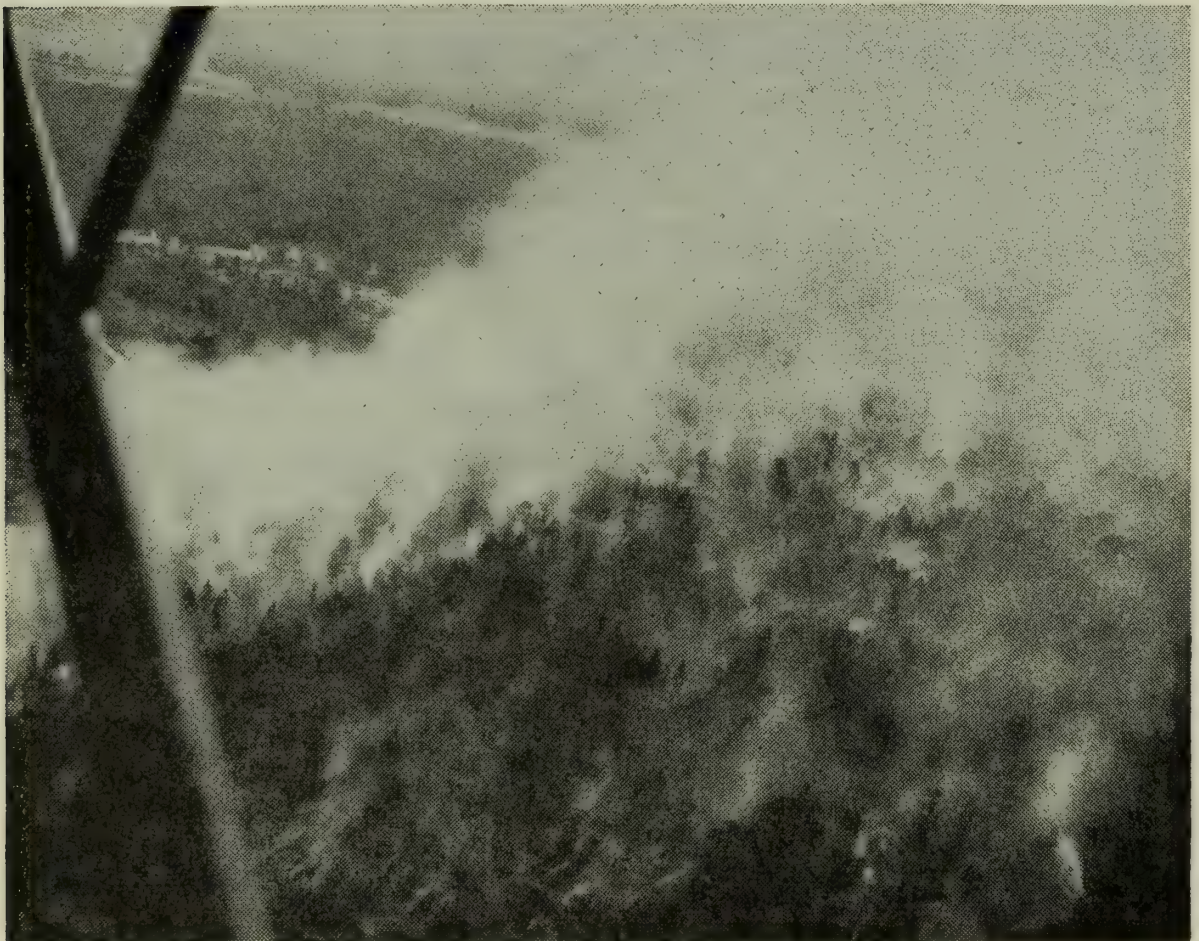
### Illegal Fires:

The 1954-55 fire season proved to be one of the most disastrous years in the history of the Commission. 1842 fires burning

89,816.0 acres occurred during the month of March alone. This represents 26.3% of all fires which occurred during the year. High fire occurrence and acreage burned was experienced throughout the summer and fall months of the first half of the fiscal year and the high rate of occurrence continued on through the month of May. During the year, a total of 7,022 fires burned 158,785.5 acres. This represents 1.41% of the total forest area under protection in South Carolina. The average area per fire was 22.6 acres.

With three exceptions all months during the year experienced a sub-normal amount of precipitation. The total rainfall for the state averaged 37.69 inches which represents a deviation of 9.57 inches below normal for this period of time. The high fire occurrence and disastrous fire losses were consistent with the dry weather conditions and brisk winds.

The average amount of rainfall experience over the state and deviation from normal by months is shown below:



The 1954-55 fire season was one of the most disastrous years in the history of the Commission. More than 7,000 forest fires burned on state and privately-owned lands in the state.



Month	Amount Rainfall (Inches)	Deviation from Normal (Inches)
July -----	3.64	—2.25
August -----	2.50	—3.17
September -----	1.63	—2.51
October -----	3.33	+0.50
November -----	2.12	—0.21
December -----	3.02	—0.57
January -----	4.20	+0.76
February -----	2.81	—1.21
March -----	1.95	—2.06
April -----	4.61	+1.36
May -----	4.26	+0.77
June -----	3.62	—0.98
<hr/>		
TOTAL -----	37.69	—9.57

### Causes of Fires:

Similar to previous years, incendiarism was the cause of the largest number of fires. Some 2,600 fires burning 77,548.8 acres were attributed to this cause alone. Smokers caused 1,836 fires burning 20,401.0 acres. Debris burning caused 1,355 fires burning 36,372.5 acres. These three causes accounted for 82.5% of all the fires which occurred.

### Legal Fires:

Legal fires are all those fires, without regard to reason for burning, which are previously authorized by the landowner and started by him or his authorized agent, and which burn entirely upon his land. A total of 2,731 legal fires burning 230,658 acres were handled by landowners during the year and recorded by the individual county unit offices. Some 420 fires burning 52,022 acres were started for hazard reduction purposes. Burning to improve woods for hunting conditions accounted for 512 fires which burned 124,433 acres. Burnings conducted to rid timber areas of accumulated debris and rubbish accounted for 1101 fires which burned 7,605 acres. 572 fires which burned 39,743 acres were conducted for woodland grazing. Burnings for miscellaneous purposes such as destruction of insects, varmints, etc., accounted for 126 fires which burned 6,855 acres.





Swimming and picnicking were two of the most popular activities that attracted more than 3 million visitors to South Carolina's state parks during the year.



## STATE PARKS

The Commission of Forestry is, in the words of the Enabling Act, responsible for the "control, supervision, maintenance and improvements" of the State Parks "for the most beneficial service to the general public." The Commission is charged with the conservation and regulated use of these scenic, historic, and recreational areas, and for the past 20 years has preserved them by careful management, improved operations, well-trained personnel, and by fostering public understanding and appreciation of these natural areas.

In reporting on the operation of state parks for the past fiscal year (1954-55) it can be stated that these state recreation areas and this department enjoyed the most successful year in the 20-year history of the Commission of Forestry's Division of State Parks. In no 12-month period since full operations were begun, have so many capital improvements been added, and for the third consecutive year annual attendance figures exceeded the three-million total.

With an annual visitation of more than three million park users it was urgent that the original facilities designed for a use-load of approximately one million be expanded and improved. To provide this relief for the over-taxed facilities, the 1954 Legislature authorized a bond issue of \$300,000 for capital improvements for all the 22 parks, with the loan being repaid from park receipts. For the first time since CCC days of the late 1930's park visitors during the 1955 summer season were greeted with many new facilities; including, bathhouses and community recreation buildings, new picnic areas complete with shelters, latrines and outdoor fire places, new swimming areas and additional family vacation cabins. To supplement the \$300,000 bond issue an additional \$100,000 of other funds was available, including a \$30,000 insurance payment for storm damage to the Myrtle Beach fishing pier. A detailed report of this program is incorporated herein.

It has ever been the purpose of the state park program to so design its facilities and control its operation that the entire family would be attracted to the state parks. Further, it was the original concept that these recreational areas, distributed from

the mountains to the seacoast, provide all facilities at a minimum cost. Admission to the parks should be free. Picnicking, hiking, fishing and game areas could be enjoyed without cost. In fact, charges were to be made only for special services. Use of bathhouse, boats and family vacation cottages, are some of the facilities and uses for which a nominal fee is charged.

### APPROPRIATIONS

The total appropriation for the Division of State Parks for operations was \$338,329. This was approximately \$21,000 less than the previous year. Requests will be made to restore this cut-back as it has already been determined that an annual operating budget of from \$350,000 to \$400,000 is needed to adequately do the job of administering the 22 areas, and maintaining facilities to serve more than three million visitors. The Capital Improvement budget totaled \$400,900 and was made as follows: \$300,000 from bond issue; \$14,400 Andrew Jackson and \$27,000 Pleasant Ridge funds brought forward from fiscal year 1953-54; \$29,000 timber sale funds from Greenwood County for the white and Negro areas of Greenwood State Park; and \$30,000 storm insurance payment on Myrtle Beach fishing pier. A detailed statement of the distribution of these funds is incorporated in this report.

### STATE PARK AREAS

During the fiscal year, 248 acres were added to two state parks—200 acres at Aiken and 48 at Barnwell. These two tracts were necessary protective strips and their acquisition greatly improves the park's holdings. At Greenwood 200 acres of surplus acreage on a "dog-leg" area was deeded back to Greenwood County and the total acreage of the park reduced by this figure. The net gain of 48 acres to the overall state system changes the total to 46,131 acres.

The twenty-two State Parks, with their acreage, location, date established or acquired, and date opened to visitors, are shown below:



Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	1,067	Aiken .....	July 1934	Aug. 1936
Andrew Jackson Historical..	360	Lancaster .....	April 1953	Under Construction
Barnwell .....	300	Barnwell .....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield .....	March 1934	July 1939
Chester .....	523	Chester .....	May 1935	July 1939
Croft .....	7,135	Spartanburg .....	May 1949	June 1949
Edisto .....	1,255	Charleston .....	Feb. 1935	June 1937
Givhans Ferry .....	1,235	Dorchester-Colleton .....	Oct. 1934	June 1937
Greenwood .....	914	Greenwood .....	April 1938	July 1940
Hunting Island.....	5,000	Beaufort .....	July 1938	June 1941
Kings Mountain.....	6,141	York-Cherokee .....	Nov. 1934	June 1940
Lee .....	2,839	Lee .....	June 1935	June 1941
Little Pee Dee.....	835	Dillon .....	June 1951	June 1955
Myrtle Beach .....	312	Horry .....	Aug. 1934	July 1936
Oconee .....	1,165	Oconee .....	July 1935	June 1937
Paris Mountain.....	1,275	Greenville .....	April 1935	June 1937
Pleasant Ridge .....	300	Greenville .....	Sept. 1950	June 1955
Poinsett .....	1,000	Sumter .....	Aug. 1934	Aug. 1936
Rivers Bridge.....	390	Bamberg .....	May 1945	July 1945
Santee .....	2,364	Orangeburg .....	Jan. 1942	June 1949
Sesqui-Centennial .....	1,500	Richland .....	Aug. 1937	June 1940
Table Rock.....	2,860	Pickens .....	May 1935	June 1940

46,131

The Commission of Forestry also administers one wayside park and seven historical areas:

Colleton Wayside, Colleton County

Eutaw Springs, Orangeburg County

Ft. Watson, Clarendon County

Thomas Sumter Burial Site, Sumter County

Burial places of:

Gen. Francis Marion, Berkeley County

Col. Isaac Hayne, Colleton County

Thomas Heyward, Jasper County

Gen. Andrew Pickens, Pickens County

## VACATION CABINS

The State Park Family Cabins have for years provided means for families to enjoy vacations in the mountains or seashore or on inland lakes and forests at small expense. The 58 cottages available heretofore have been in such demand each summer that many families failed to get a reservation in the annual drawing. The number has now been increased, with new cottages as follows: Two additional cottages at Edisto and one at Table Rock; and for the first time, three new cottages at Hunting Island and two at Santee. Two new cottages were constructed at Pleasant Ridge State Park for Negroes and two at the Negro area of Hunting Island. This provides modern vacation cottages in the mountains and at the seashore for the use of Negro families.





One of the two family vacation cabins constructed at Santee State Park. Additional cottages for whites were constructed at Edisto Beach, Table Rock, and Hunting Island State Park.

Location of Family Vacation Cabins

Schedule of Rates

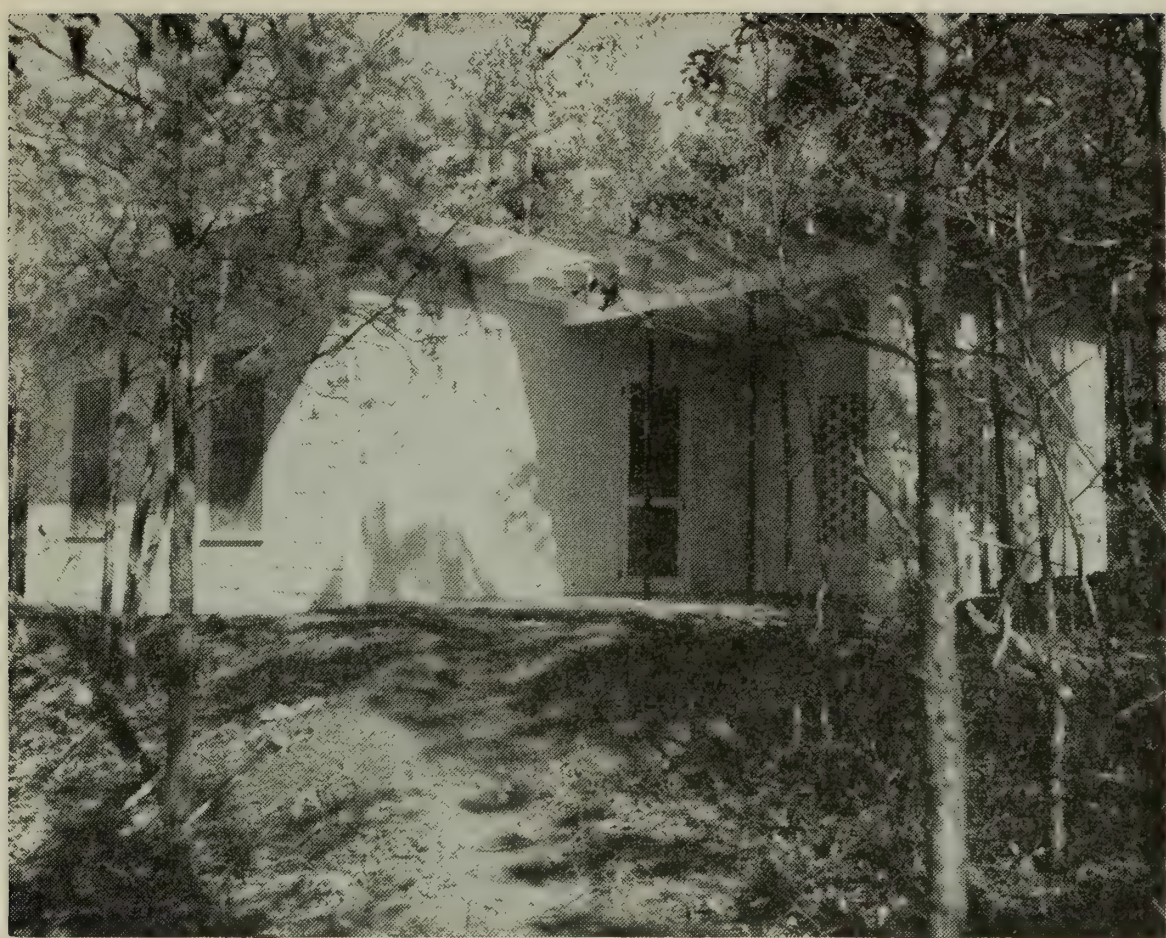
Park	County	No. of Cabins	Weekly	Out of Season Week-End
Cheraw	Chesterfield .....	9	\$24-36	\$ 9-15
Edisto Beach	Charleston .....	5	33	15
Givhans Ferry	Dorchester .....	5	24	9
Hunting Island	Beaufort .....	4	36-45	15-20
Myrtle Beach	Horry .....	5	36	15
Oconee	Oconee .....	20	20-36	8-15
Poinsett	Sumter .....	6	24-42	9-15
Santee	Orangeburg .....	2	28	12
Table Rock	Pickens .....	12	24-44	10-15

Facilities for Negro Families

Hunting Island	Beaufort .....	2	35	12.50
Pleasant Ridge	Greenville .....	2	35	12.50

All cabins have electric lights, electric stoves, and electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin-user must bring blankets, bed linen and towels, and silverware, such as knives, forks and spoons, as these are not included.





One of the two new vacation cabins for Negro families constructed at Pleasant Ridge State Park. Two cottages for Negro families were also constructed at Hunting Island.

During the period June 1st through Labor Day *summer rates* are effective and cabins are rented for a period of one week only. This is necessary because the demand for cabins for weekly vacations exceeds the number of cabins available.

To give every family an equal opportunity to obtain a cabin, assignments are made as a result of a public drawing. All South Carolina applications are considered first; then out-of-state applications are reviewed.

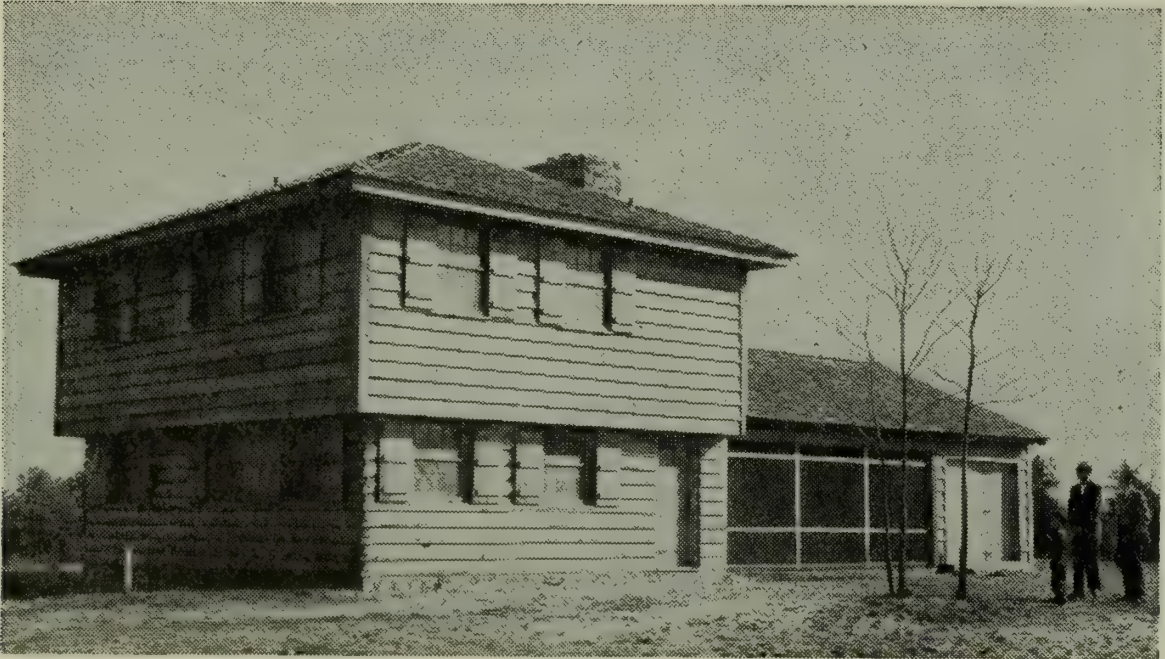
Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, Box 357, Columbia, S. C., and must be received in Columbia prior to March 1st.

### **Group Camps**

Seven group camps—six for white and one for Negro campers—located at four state parks, Paris Mountain, Cheraw, Kings Mountain and Poinsett, continue to supply the facilities for



several hundred children seeking out-of-doors adventure. With a daily capacity of 550 campers and about 13 weeks in the summer season, some 38,000 camper days are counted at the seven areas. Church and school groups, Boy and Girl Scouts, YMCA and YWCA's make up the greater portion of the use agencies.



Museum-Residence building was constructed at Andrew Jackson Historical State Park.

### Historical Areas

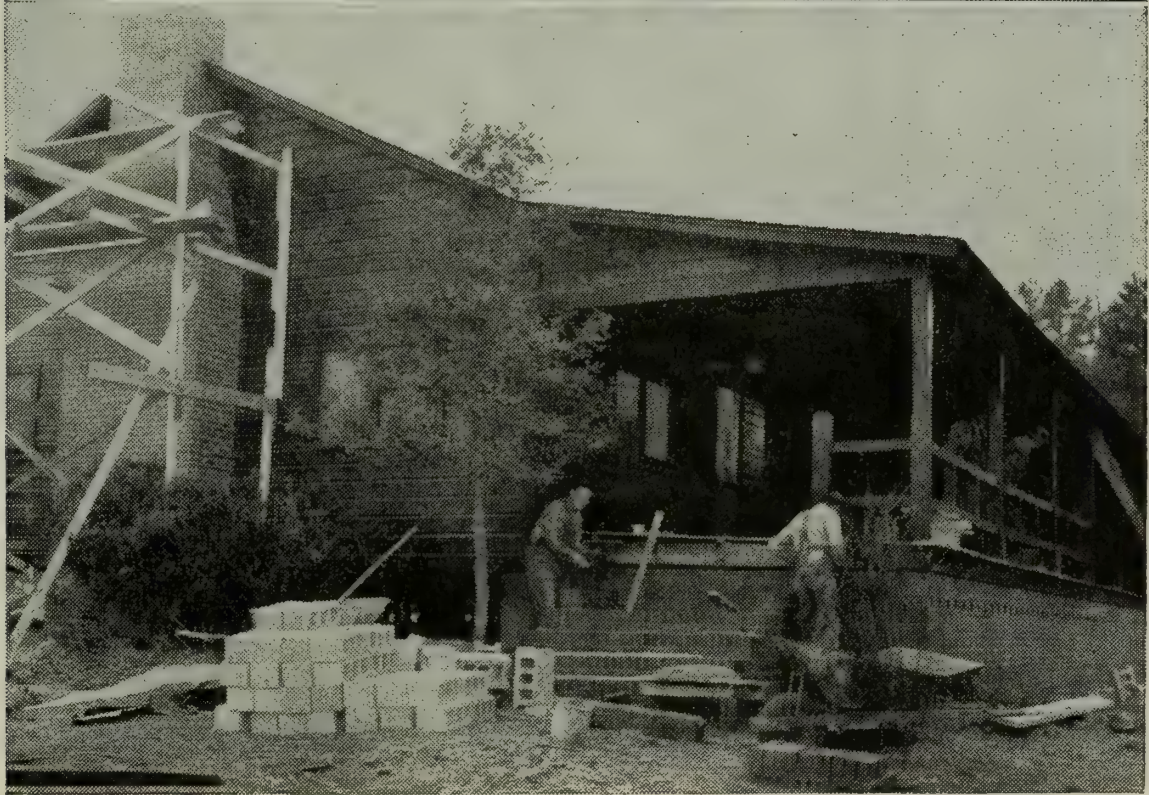
The Division of State Parks is charged by the Legislature to maintain seven historical areas within the State and receives a special appropriation for this purpose.

The Fort Watson Memorial, an Indian Mound in Clarendon County; the General Thomas Sumter burial area in Sumter County; and the Eutaw Springs Historical Site in Orangeburg County, were deeded to the Commission of Forestry and a definite program of maintenance is in operation.

The burial places of General Francis Marion at old Bell Isle Plantation in Berkeley County, of Col. Isaac Hayne in Colleton County, and of Thomas Heyward in Jasper County are in private ownership and receive clean-up attention from the Commission.

General Andrew Pickens is buried in the Old Stone Churchyard at Clemson and his grave is also administered by the Commission.





Major repairs to inside and outside recreation building at Oconee State Park were made during the year.

## REPORT ON THE CAPITAL IMPROVEMENTS PROGRAM (As of June 30, 1955)

The 1954 Legislature authorized the Division of State Parks to borrow \$300,000 to expand the facilities of the state parks through a capital improvements program, and to repay the indebtedness from park receipts. The program became operative July 1, 1954.

During the year many necessary and highly desired improvements were made in all the parks. Some 44 new structures were



added, including new bathhouses and picnic shelters, residences and work centers, community recreation buildings and family vacation cabins, all of which brought added conveniences and facilities to the three million state park visitors.



View of lake and new bathhouse at Pleasant Ridge State Park for Negroes, where picnic area, latrines, water system, and vacation cabins were constructed during the year.

A substantial catching-up of delayed developments was done at such parks as Hunting Island, Santee, Little Pee Dee, Pleasant Ridge, Greenwood, Andrew Jackson and Croft. Croft's program of expansion is still in progress. The Myrtle Beach Fishing Pier was rebuilt and opened again in late June, 1955, financed principally from insurance payment. Those areas having the greater need received the larger apportionment, however, all areas profited to some degree by the bond issue.





View of part of fishing concession building at Santee State Park where boats, bait, meals, and supplies can be obtained.

Below is listed the facilities developed at each state park together with the expenditures:

Park	Program	Cost
Aiken	Land purchase, 200 acres .....	\$ 2,150
Andrew Jackson	Museum-residence; water system; shelter; latrine .....	35,706 <sup>1</sup>
Barnwell	New picnic area; land purchase, 48 acres .....	7,364
Cheraw (Negro area)	Bathhouse & Concession; water system	7,400
Chester	Residence; Pump house & office.....	10,886
Croft	Picnic area complete; superintendent's residence; garage-workshop.....	7,831 <sup>2</sup>
Edisto Beach	Two vacation cabins; ranger's residence	19,626
Givhans Ferry	Demonstration forest project.....	624
Greenwood (white area)	Picnic shelter; barbecue shelter; latrine; bathhouse and beach; water system extensions	
(Negro area)	Ranger's residence; picnic area complete; water system.....	41,988 <sup>3</sup>

Hunting Island (white area)	Superintendent's residence; three vacation cottages; restaurant building	
(Negro area)	Picnic shelter; two vacation cabins.....	51,277
Kings Mountain	Picnic shelter; new well for existing water system .....	5,058
Lee	Bathhouse .....	11,407
Little Pee Dee	Clearing lake basin; bathhouse & beach	22,089
Myrtle Beach	Fishing pier .....	44,051 <sup>4</sup>
Oconee	Major repairs to recreation building; garage and workshop .....	8,001
Paris Mountain	Garage-repair shop .....	3,905
Pleasant Ridge	Picnic area; latrines; bathhouse; water system; two vacation cabins .....	35,733 <sup>5</sup>
Poinsett		
(white area)	Beach enlargements	
(Negro area)	Caretaker's residence .....	3,761
Rivers Bridge	Community recreation building .....	22,007
Santee	Fishing concession; two family vacation cabins .....	23,271
Sesqui-Cent.	Garage-repair shop .....	4,431
Table Rock	One vacation cabin, boat house .....	7,354
		<hr/>
Total Expenditures .....		\$ 375,920
Earmarked for Croft .....		22,600 <sup>2</sup>
Balance on Hand .....		2,380
		<hr/>
		\$ 400,900
Bond Issue Loan .....		\$ 300,000
Other Funds .....		100,900 <sup>1,3,4,5</sup>
		<hr/>
		\$ 400,900

<sup>1</sup> \$14,400 of 1953-54 funds, balance from bond issue fund.

<sup>2</sup> Program still in progress—\$22,600 in funds earmarked for Croft State Park.

<sup>3</sup> Special funds from Greenwood County's timber sale, \$29,500.

<sup>4</sup> \$30,000 from storm insurance; balance from bond issue fund.

<sup>5</sup> Financed by \$27,000 of special 1953-54 funds, balance by bond issue fund.





A new picnic area was constructed at Croft State Park during the year.

### Recommendations

To the 1956 Legislature we respectfully make the following recommendations:

1. Make available an adequate budget for the increased operations of 22 state parks; and to include especially items—
  - a. To offset depreciation of buildings, installations and equipment.
  - b. To provide approximately 10% pay increases to permanent personnel and to extra summer personnel who have had no increase in five years.
2. While it has been repeatedly stated that the areas comprising the State Park system are generally adequate to serve the people of South Carolina, the following are exceptions to this generalization:
  - a. Two additional state parks for use by Negroes are needed—one in the Charleston area and another in the vicinity of Columbia.

- b. Next in order for a state park for whites should be the area centering around Williamsburg County.
  - c. A state park near Anderson when the Hartwell Dam project reaches the planning stage.
  - d. The development of the two acquired areas on the Clarks Hill Reservoir, Baker Creek for whites and Hickory Knob State Park for Negroes, should follow in a fourth priority position.
3. That the Legislature be alert to defend the integrity of the state park system against all encroachments, including threats from organizations or individuals tending to break down the segregated use of parks. To enact legislation, if necessary, to preserve for this and future generations this extraordinary natural resource valued at more than \$6,000,000. To keep intact the 22 state recreation areas, embracing 46,000 acres of natural woodlands and waters, for if once abandoned, this resource could never be recovered.



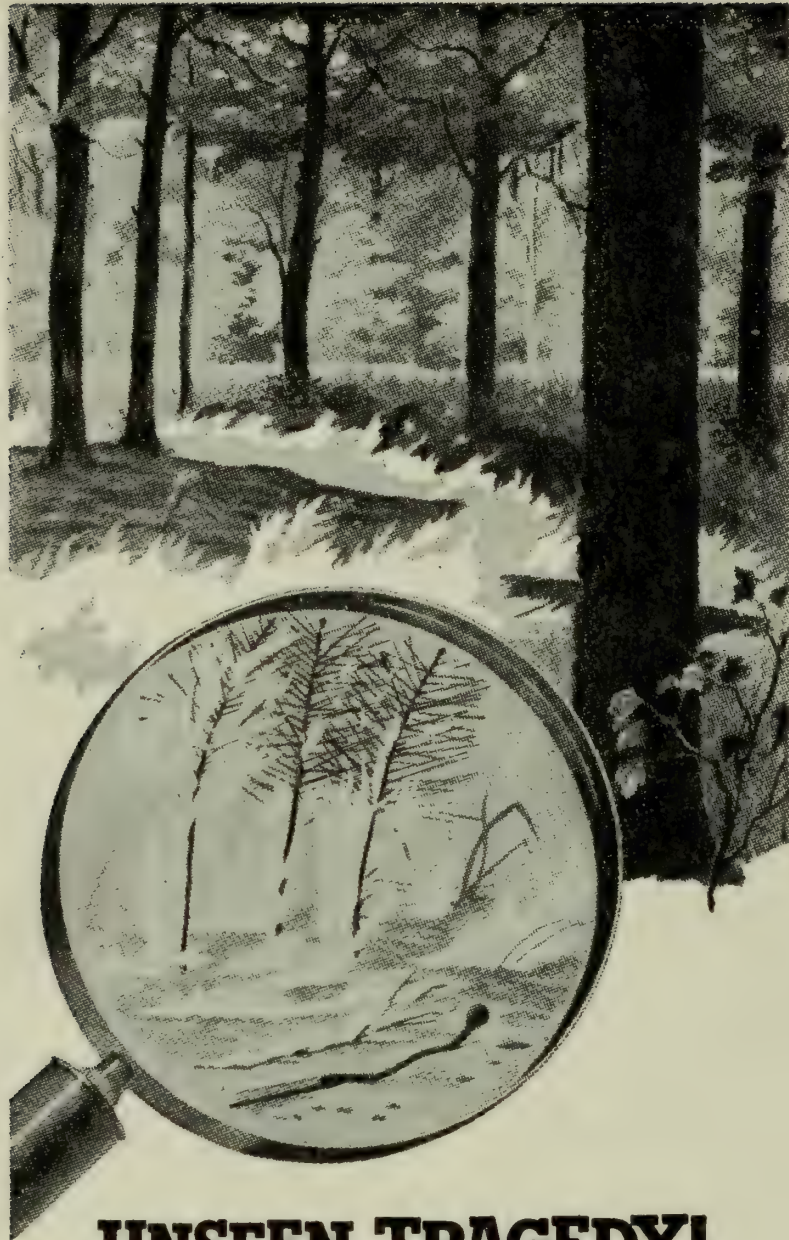
## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Negro Areas	Trailer & Tent Camping †
Aiken Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x			
†ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																	
BARNWELL Blackville, S. C. ....	x	x	x	x	x	x	x				x		x		x			x
CHERAW Cheraw, S. C. ....	x	x	x	x	x	x	x	x			x		x	x	x	x	x	x
CHESTER Chester, S. C. ....	x	x				x	x				x				x			
CROFT Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x			
EDISTO BEACH Edisto Island, S. C. ....	x	x	x	x	x	x	x	x					x		x			
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x			
GREENWOOD Ninety Six, S. C., RFD.....	x	x	x	x	x	x	x						x		x		x	
HUNTING ISLAND Frogmore, S. C. ....	x	x		x	x	x	x	x				x	x		x		x	x
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x		
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x			
LITTLE PEE DEE Dillon, S. C. ....	x	x	x	x	x	x	x											
MYRTLE BEACH Myrtle Beach, S. C. ....	x	x		x	x		x	x		x	x		x		x			x
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x	x	x			x
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x		
PLEASANT RIDGE (For Negroes) Cleveland, S. C. ....	x	x		x	x	x	x	x									x	
POINSETT Wedgefield, S. C. ....	x	x	x	x	x	x	x	x				x	x		x	x	x	x
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x			
SANTEE Elloree, S. C., RFD.....	x	x		x	x	x	x	x					x		x			
SESQUI-CENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x			
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x			x

\* Where no regular Barbecue Pit and shelter are established, temporary arrangements can be made at all Parks.

† Construction underway.

‡ Where no developed camping areas are established, temporary arrangements can be made at all parks.



## UNSEEN TRAGEDY!

**HIDDEN IN THE GRASS** out of sight from the casual eye are *the future woods of America*. Tiny trees—just seedlings hardly hand-high, but the timber of tomorrow.

That's why apparently harmless, slow-burning grass or brush fires are in reality as deadly as though they were burning the big trees. These "harmless" fires *are*

forest fires, too. They destroy those tiny seedlings.

So for America, for your children, pledge yourself to be extra careful with matches, smokes, campfires—*any* fire. Make sure every spark is out—*dead* out! Remember those tiny trees hidden away in the grass, growing for tomorrow.

*Remember—Only you can*  
**PREVENT WOODS FIRES!**



Like other American business firms, we believe that business has a responsibility to contribute to the public welfare. This advertisement is therefore sponsored in cooperation with The Advertising Council and U. S. and State Forest Services by:

SPONSOR'S NAME

One of the newspaper ads used in the 1955 nationwide Cooperative Forest Fire Prevention Campaign. This is the third year that the Campaign has emphasized the S. C. State Commission of Forestry's philosophy of fire prevention education.



# INFORMATION AND EDUCATION

## INTRODUCTION

The principle of informing and educating the people of South Carolina as to forest conservation problems and opportunities has been followed since the Legislative Act of 1927 created the Commission.

Because 93% of the forest land in South Carolina is in private ownership, it is obvious that people must know forestry facts and techniques in order to turn forestry problems into opportunities. The need for solving these problems is pointed up by the fact that even though the forests of South Carolina support the state's second largest industry (next to textiles), the forests are producing at less than half of their potential capacity. When people realize the potential value of woodland production and apply practical methods of conservation and wise use, the amount of wood available for commercial use can be more than doubled. Practically all of the problems of forest conservation in South Carolina can be solved only through the efforts of the people who own the land and the general public who have an individual responsibility in the protection of these vital raw materials.

With the adoption of known techniques in forest conservation not only would the future supply of existing woodusing industries be assured, but also the increased supply would permit an expansion of this important part of the economy of South Carolina.

Creating an understanding and an appreciation of the value and proper use of state park areas involves an informational and educational approach.

In carrying out the Commission's state park and forestry activities, its information and education program is keyed to the following problems:

### 1. Forest Fire Protection

More than 6,000 illegal woods fires occur every year in South Carolina.

Landowners burn their own woods or permit their woods to be burned in all too many cases.

2. Unwise cutting practices mean low production and inferior forest products.
3. Some one and one-half million acres of idle land or unproductive forest land should be planted to trees.
4. Species of inferior quality occupy much of the existing forest land in the State. These inferior trees must be replaced with trees of good quality to achieve full woodland production.
5. Full use and appreciation of South Carolina's state parks.

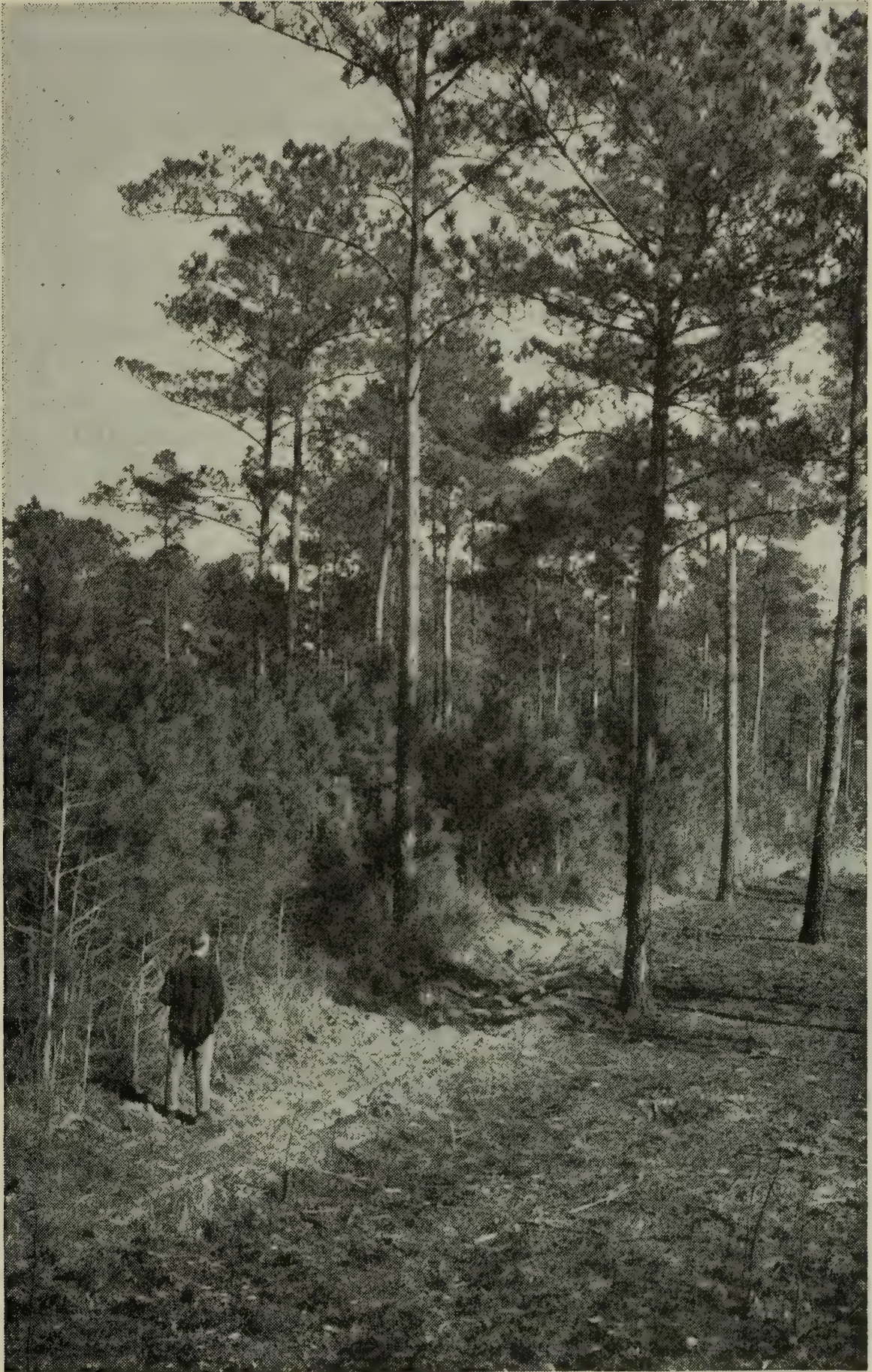
### **Forest Fire Prevention**

The guiding philosophy of forest fire prevention as carried out by the Commission directs major emphasis to the damage caused by the average slow-burning quiet fire that South Carolinians are accustomed to seeing. This damage has been emphasized in terms of little trees hidden from the eye of the casual observer and destroyed in any fire that burns the grass or woods litter close to the ground.

This approach, after five years, has proved to be a most realistic and most effective method of teaching forest fire prevention in South Carolina.

Commission personnel conduct an intensive forest fire prevention program in each county. On the premise that face to face contact with people is the best way to teach forest fire prevention, Commission rangers and wardens in all counties are equipped with personal teaching aids. One of these is a little pine tree embedded in a block of clear plastic approximately  $1\frac{1}{4}$  inches wide by  $4\frac{1}{2}$  inches long. In this way fire fighting personnel can carry a little tree in their pocket and thus be ready to talk fire prevention at every opportunity. This device supports the point that "even little fires kill little trees." After such a discussion the ranger or warden may give the person a pocket calendar carrying a full color illustration of the hand behind the little tree and the message "For our children's future and our nation's strength—lend nature a hand—protect little trees." The fishing guide on the back of the calendar provides added interest. This has proven to be a popular and effective forest fire prevention tool.





**"Even Little Fires Kill Little Trees"—a picture story. Land on the right burns every year, killing little trees. On the left, protected by firebreak, a new crop of trees is developing.**



Another fire prevention "personal contact tool" distributed by rangers and other Commission personnel is match books with a forest fire prevention reminder.

Recognizing the need for public display of the idea expressed in the pocket calendar, the Commission produced wall calendars measuring 21 x 28 inches. It carried a color photograph of the hand behind the little tree with the message "Lend Nature a hand—Protect little trees." These calendars are distributed by State Commission of Forestry personnel for display in stores, barber shops, and other public places.

During the year Commission personnel continued to make effective use of their 35 mm slide projector and colored slides. In addition to showing to family and other adult groups, educational programs were again conducted in school classrooms. At the conclusion of such a school program the ranger or warden would usually give the children a color photograph of the hand behind the little tree, and many of these photographs were



Posters—one tool used by Commission personnel to keep fire prevention reminders before the public.



eventually framed by the children for a permanent addition to their classroom.

In order to reach a broad segment of the public, a most important distribution was made through the cooperation of the State School Book Commission, which once again made it possible for the State Commission of Forestry to place a forest fire prevention message on the front panel of school book covers. The design, a photo of the hand behind the little tree, with the message **FOR YOUR FUTURE AND OUR NATION'S STRENGTH . . . LEND NATURE A HAND, PROTECT LITTLE TREES** appeared on the run of 836,325 schoolbook covers distributed to schools during 1954-55 to protect state-owned textbooks.

One of the most effective fire prevention approaches was the personal visit and individual demonstration to the landowner in his own woods. This demonstration was accompanied by the simple technique of the ranger or warden laying out a 1/1,000 acre plot on the ground. Such a plot measures approximately 6 feet seven inches by six feet seven inches and is simple to stake out on the ground. After this known area is laid out the teacher parts the grass with his hands and allows the landowner to discover his own little trees provided by Nature. Usually several little trees are found on this sample plot, and that number multiplied by a thousand equals the number per acre if the plot is a fairly representative sample of the area. When the landowner realizes that he has from one to several thousand little trees per acre hidden in the grass, adding at least \$10.00 per acre to the value of his land he has a dollars-and-cents reason for fire prevention. It has been the experience of Commission personnel that most landowners are surprised to learn of the existence of these little trees. Even experienced woodsmen have registered surprise and keen interest in such a demonstration.

Knowledge and understanding of these efforts of Commission personnel in their day to day contacts with landowners in each county give point to other efforts embodying the Commission's little tree idea of forest fire prevention. For example, whenever other organizations use a sketch of the hand behind the little tree or use the term "protect little trees," and other related simplifications it serves as a reminder of the more complete story.

## COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

For the fourth successive year the Commission's philosophy was used in the Cooperative Forest Fire Prevention Campaign. This national program, featuring Smokey Bear, is guided by The Advertising Council, Incorporated, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service, and is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in taking their assignment from The Advertising Council to make the Cooperative Forest Fire Prevention Campaign possible.

In support of this national campaign a wide variety of materials featuring Smokey Bear are used in South Carolina.

### Forest Fire Record

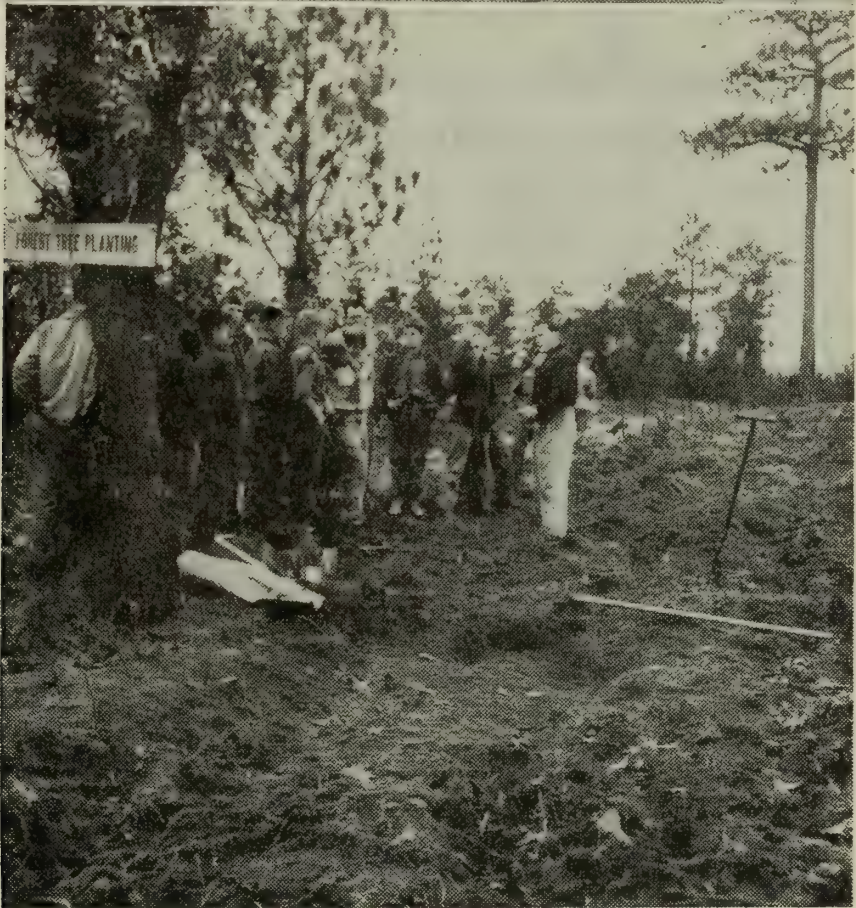
The branch of Information and Education continued to keep the press and public informed accurately as to the forest fire situation throughout the State. Due to the drought of the summer of 1954 with below normal rainfall extending into the fall, winter and spring of 1955, a critical fire situation existed during the months of February, March and April. The Commission was active in trying to keep abreast of the demands made for information, articles and photographs for newspapers, and motion picture footage for television use.

The high occurrence and resulting damage from intentionally set fires during the year pointed up the urgent need for an intensified program of child and adult education as well as a need for a strengthened law enforcement program.

### School Programs

Foresters, Rangers and Wardens of the Commission of Forestry conducted 1,108 programs in schools throughout the State. The main effort was directed to holding a program in every fifth and sixth grade, and in every vocational agriculture class in each county. As a result of requests from teachers, programs were held in many other classes, too. In most of these programs, color slides were used to illustrate important points of instruction. Many of the slides used were of local scenes and local problems, and proved of great local interest and educational value.





Forestry demonstrations were part of Conservation Camporee at Camp Coker Boy Scout camp.



The broad aim of the Commission's school programs is to build a stronger and more appreciative community of the future by giving good instruction and information to our children as to the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

### **Forestry Demonstrations**

During the year 3,075 persons attended 136 demonstrations conducted by foresters of the Commission of Forestry. These demonstrations in general covered the field of forest fire protection, correct cutting methods, utilization of forest products, and reforestation.

Demonstrations are very effective in getting forestry information to people and can do much to help make it possible to grow an appreciably greater amount of valuable wood on the 12,000,000 acres of forest land in the state.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson Extension Service, and others.

### **Georgetown Timber Festival**

The second annual Georgetown Timber Festival was held during the week of August 30-September 4, 1954. Sponsored by the Georgetown Chamber of Commerce, the festival constitutes an expression of appreciation by the people of Georgetown to the woodusing industry of the county and the good living realized from the sale of raw products from the woodlands of the county and the manufactured products from the mills. The activities of the week included boat races, barbecues, a wood cutting contest, street and ballroom dances, crowning of a queen, and an impressive street parade. The Commission of Forestry participated in the Timber Festival by providing exhibits for stores, a float for the parade, and motion picture footage for television news coverage.

### **Conservation Week and Arbor Day**

Many people, agencies and organizations cooperated to make the 1954 Conservation Week a real success. South Carolina law establishes the first Friday in December as Arbor Day, and the



week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, Clemson College Extension Service, Soil Conservation Service, the State Department of Education, newspapers, radio and television stations and other groups cooperate in placing the challenge of conservation before the people of South Carolina.

As in the past, a special issue of "Forestry and Park Notes" was distributed to schools, churches, civic and patriotic organizations and other interested groups to assist them in planning programs and observances during Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

A total of 709 Conservation Week and Arbor Day programs were held, with 80,663 persons attending.

### **Fire Prevention Roadside Signs**

During the year Commission rangers and wardens completed the erection of forest fire prevention signs along major highways of the State. The roadside sign project, which was initiated the previous year, is financed and carried out by the Commission. Representatives of the Garden Club of South Carolina and the Keep South Carolina Green Committee of the South Carolina Forest Industries Committee cooperated with the State Commission of Forestry in obtaining permission from the State Highway Department to erect the signs along highways.

In placing the signs, hazardous woodland areas and heavily traveled highways were given priority. The signs are erected in a series of three, each carrying the Keep South Carolina Green seal, and messages in the following sequence: USE YOUR ASH TRAY—PREVENT WOODS FIRES—PROTECT LITTLE TREES.

The Commission has obtained basic coverage on the main highways over the state, with the erection of 450 signs. It is hoped to be able to intensify this project from year to year by providing additional signs along highways where thousands of motorists will see these forest fire prevention reminders.





One of the 450 fire prevention roadside signs erected by Commission personnel along South Carolina highways.

## MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement lectures or talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is routed on schedule for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 16,145 people saw motion pictures on forestry at 262 showings.



## VOCATIONAL AGRICULTURAL SCHOOL FORESTRY PROGRAM

An excellent means of getting forestry information to many people is through the school forestry program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes.

The Forestry Commission sponsors an annual FFA Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1954-55 school year awards were presented to the winning FFA Chapters in each Vocational Agriculture District as follows:

- |          |     |   |
|----------|-----|---|
| District | I   | (1) Pendleton FFA Chapter (Anderson County)     |
|          |     | (2) Mauldin FFA Chapter (Greenville County)     |
| District | II  | (1) Jonesville FFA Chapter (Union County)       |
|          |     | (2) Mt. Zion FFA Chapter (Fairfield County)     |
| District | III | (1) Dentsville FFA Chapter (Richland County)    |
|          |     | (2) Edgefield FFA Chapter (Edgefield County)    |
| District | IV  | (1) Smoaks FFA Chapter (Colleton County)        |
|          |     | (2) Walterboro FFA Chapter (Colleton County)    |
| District | V   | (1) Wampee FFA Chapter (Horry County)           |
|          |     | (2) Kingstree FFA Chapter (Williamsburg County) |

Plaques and prize money were presented to the winning chapters at the State FFA Convention.

For the 1954-55 School Year prizes were offered to the winning Negro Vocational Agriculture Chapters, and the following NFA Chapters won awards for their chapter forestry work:

District III (1) NFA Chapter, Edgefield Academy (Edgefield County)

District IV (1) NFA Chapter, Butler School (Bamberg County)

(2) NFA Chapter, St. George Negro High School (Dorchester County)

### RESOURCE-USE EDUCATION

Commission personnel participated in a number of workshops for teachers during the year to stimulate the teaching of conservation at various grade levels in the schools of the state. Two resource-use education workshops were held at the University of South Carolina, and two were held at Clemson College during the year in which Commission personnel assisted with instruction in forestry, and the use of state park facilities. Commission personnel also took part in a pre-school training session for seventh grade teachers at Greenville in connection with the conservation education and school camping program carried on during the school year by these teachers at Table Rock and Paris Mountain State Parks.

The Forestry Commission in June participated in a forestry workshop for vocational agriculture teachers at Georgetown, sponsored by International Paper Company.

In addition to the workshops mentioned above, forestry and state parks personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation.

The Resource-Use Education movement has stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the state parks for this purpose. It has been demonstrated that using these facilities and camping on school time creates a very effective teaching situation.

The State Commission of Forestry welcomes this instructional use of state parks, and Commission personnel cooperated with



several groups during the year to develop worthwhile projects in day camping and school camping at the state parks.

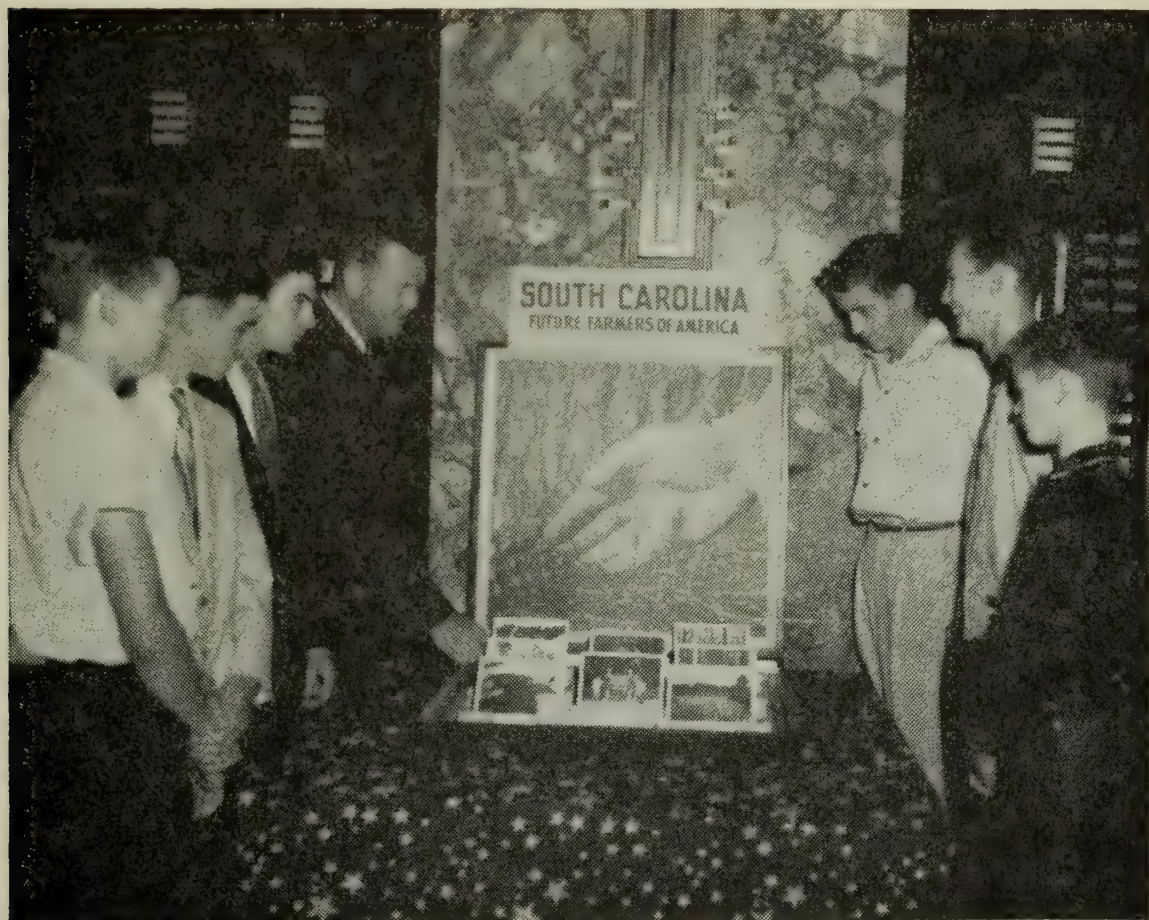
### TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and state parks before many groups. The quality of talks improved considerably during the year due to training, and the use of color slides with the talks undoubtedly made the talks much more interesting and more effective.

During the year a total of 1,947 talks were made by Commission personnel to 33,914 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

### EXHIBITS

The Forestry Commission welcomed the many requests by county fair organizations, garden clubs, church, school, and other groups for educational forestry and state park exhibits because they provide an excellent opportunity for placing forestry and state park information before the people.



Forestry exhibit displayed by South Carolina delegates to national FFA Convention at Kansas City, Mo.



The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits where practicable in an effort to attract the attention of people attending fairs and special gatherings.

Until the past several years an exhibit was rarely requested except for state and county fairs. During this year, garden clubs and other groups requested exhibits regularly throughout the year. This is an indication of interest in forestry and state park activities by various groups of people.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and state park information through personal contacts by Commission personnel on duty and through the distribution of literature.

Exhibits were installed by Commission personnel at 60 locations and were seen by an estimated 958,875 persons.

The following is a record of where forestry and state park exhibits were displayed:

Location of Exhibit—County Fairs	Type of Exhibit	Estimated Attendance
Chesterfield .....	Automatic Slide Projector .....	5,000
Kershaw .....	Planting Section, State Fair Exhibit 1953 .....	12,000
Kershaw (N) .....	Planting Section, State Fair Exhibit 1953 .....	5,000
Lancaster .....	Gum Cross Section .....	10,000
Lancaster (N) .....	Gum Cross Section .....	4,000
Bishopville (Lee) .....	F. C. Section, State Fair Exhibit 1953 .....	10,000
Bishopville (Lee) (N) .....	F. C. Section, State Fair Exhibit 1953 .....	7,000
Sumter .....	Talking Smokey .....	30,000
Sumter (N) .....	Talking Smokey .....	15,000
Florence .....	Talking Smokey .....	60,000
Loris (Horry) .....	Selected Murals .....	6,000
Conway (Horry) .....	Automatic Slide Projection .....	2,000
Marion .....	Automatic Slide Projector .....	25,000
Bennettsville (Marlboro) .....	Automatic Slide Projector .....	2,500
Moncks Corner (Berkeley) .....	Automatic Slide Projector .....	5,500
Manning (Clarendon) .....	F. C. Section, State Fair Exhibit 1953 .....	2,200
Manning (Clarendon) (N) .....	F. C. Section, State Fair Exhibit 1953 .....	13,800
Kingstree (Williamsburg) .....	F. C. Section, State Fair Exhibit 1953 .....	2,700
Chester .....	Mgt. Section, State Fair Exhibit 1953 .....	28,000
Chester (N) .....	Mgt. Section, State Fair Exhibit 1953 .....	8,000
Greenwood .....	Gum Cross Section .....	41,000
Laurens .....	Planting Section, State Fair Exhibit 1953 .....	25,600
McCormick .....	Miniature State Fair Exhibit .....	3,750
Newberry .....	Mgt. Section, State Fair Exhibit 1953 .....	26,000
Anderson .....	F. C. Section, State Fair Exhibit 1953 .....	12,000
Greenville .....	Gum Cross Section .....	30,000
Pickens .....	Planting Sec., State Fair Exhibit 1953 .....	25,000
Union .....	Planting Sec., State Fair Exhibit 1953 .....	30,000
Rock Hill (York) .....	Planting Sec., State Fair Exhibit 1953 .....	50,000
Charleston .....	Mgt. Section, State Fair Exhibit 1953 .....	30,000
Charleston (N) .....	Mgt. Section, State Fair Exhibit 1953 .....	10,000
Walterboro (Colleton) .....	F. C. Section, State Fair Exhibit 1953 .....	5,000
TOTAL .....		592,050
<b>State Fairs</b>		
Columbia .....	Talking Smokey .....	180,000
Columbia (N) .....	F. C. Section, State Fair Exhibit 1953 .....	80,000
TOTAL .....		260,000



**EXHIBITS, FLOATS, AND DISPLAYS FOR SPECIAL EVENTS**  
**(Other Than County or State Fairs)**

Camden (DuPont May Plant)—Talking Smokey .....	2,000
Camden (Christmas Parade)—Smokey Float .....	7,000
Florence (Christmas Parade)—Smokey Float .....	25,000
Florence (Pee Dee Fair) Murals .....	5,000
Conway (Electric Coop. Fair)—Automatic Slide Projector .....	3,000
Georgetown (Timber Festival)—Roadside Sign Float; F. C. Sec. 1953 State Fair Exhibit; Miniature State Fair Exhibit; Automatic Slide Projector; Roadside Sign Display .....	15,000
Kingstree (REA Electric Fair)—Murals .....	6,200
Newberry (Forestry Week)—Murals .....	7,000
Denmark (SCE&G office display)—Murals .....	750
Orangeburg (Library)—Little Tree Exhibit .....	800
Rock Hill (Childrens Nature Museum)—Special Talking Smokey .....	12,000
St. George (Gala Day)—Murals .....	2,000
North Charleston (Garden Clubs)—Automatic Slide Projector .....	150
Walterboro (SCE&G window display)—Murals .....	3,000
St. George (SCE&G window display)—Murals .....	2,000
Estill (window display)—Murals .....	1,500
Columbia (State Advisory Committee of Forestry Boards)—F. C. Section 1953 State Fair Exhibit; Roadside Sign Display .....	50
Columbia (Conference of Social Work)—More than 3 million visitors enjoy South Carolina's state parks each year .....	800
Camp Coker (BSA Conservation Camporee)—Murals .....	125
Columbia (Appalachian Section, SAF)—The Thinking Behind Fire Prevention .....	200
Kansas City, Mo. (National FFA Convention)—Selected Forestry Photos .....	9,000
Charlotte, N. C. (Carolina Lumber and Builders Supply Ass'n)—Talking Smokey .....	1,000
Dillon (Textile Ind. Parade)—Roadside Sign Float .....	1,000
Florence (Fire Prevention Parade)—Roadside Sign Float .....	1,000
Charleston (Industrial Management Club)—Gum Cross Section .....	1,000
District Board Meetings—Talking Smokey .....	250
<b>TOTAL .....</b>	<b>106,825</b>
<b>GRAND TOTAL .....</b>	<b>958,875</b>

Note (N): Negro

## RADIO AND TELEVISION

Radio and television are valuable for getting forestry and state park information to large numbers of people.

Radio stations in South Carolina generously cooperated with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, as well as information on state park facilities.

Several districts have regularly scheduled programs on various radio stations. All districts have used radio to some extent. Many rangers use local radio stations to give warnings of periods of high fire danger, to give tips on how to prevent fires, and to present other information on forestry. Records show a total of 248 radio programs on state parks and forestry were presented during the year, in addition to recorded spot announcements and recorded 15-minute radio programs made available through the Cooperative Forest Fire Prevention Campaign.

During the year many radio stations broadcast the two 13-week series of 15-minute programs produced as part of the nationwide Cooperative Forest Fire Prevention Campaign. These

programs, featuring Jelly Elliott and the Three Knotheads; and Billy Johnson, The Singing Woodsman, and the Sons of the Pioneers have been very popular in South Carolina, and several stations have repeated the series. These programs combine hill-billy, western and folk music with stories and messages on forest fire prevention and on other phases of forestry. In addition, many radio stations used platters containing short forest fire prevention messages which were produced as part of the CFFPC program.

Commission personnel appeared on several television programs, and provided films, slides, and other materials on state parks and forestry for TV use. Motion picture film trailers featuring Smokey Bear were distributed to all TV stations in the State, and were widely used.

The Commission of Forestry plans to continue using radio and television facilities to help do the job of informing and educating in the fields of forestry and state parks in South Carolina.

## TRAINING

The past year has seen a marked increase in appreciation of the place that every employee of the Forestry Commission has in doing the information and education job. Because the Forestry Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective, talks and slide lectures in all phases of our work are more interesting and more effective. Fire control training stressed the fact that the forest fire prevention program and an expanded forest management program depend on the effectiveness of the selling job done by each member of the organization in his respective community.

State Park personnel are continually aware that in order to serve the public and to promote an understanding and appreciation of the state parks program and its objectives, a continuing job of informing and educating park users is necessary.



## NEWS RELEASES AND ARTICLES

Newspapers and magazines accepted and used much material prepared by personnel of the Commission on forestry and state parks. There is constant effort to furnish better quality photographs and written material for the editors. The material is also more acceptable to the readers because it is more readable and more interesting.

During the year Commission personnel prepared 800 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during fire situations, news items would be given orally to individual papers and to the wire services.

In addition to news releases, several feature articles on various phases of state parks and forestry were prepared. Pictures or prepared mats illustrating the story were usually sent with the feature.

During the year a number of special articles were prepared for magazines and other special publications to provide state park and forestry information to general and special audiences.

Forestry Commission personnel in every county of the state prepared news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors. The excellent press coverage has helped place forestry and state park news before the people more prominently than ever before.

## BOYS' FORESTRY CAMP

The eighth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 2-7. Eighty-one young men representing every county in the State attended the week-long camp. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject "Why I Would Like To Attend Boys' Forestry Camp." On invitation of the Commission, 20 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the State. In the same manner 20 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and fun characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planning techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by state parks.

## PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out the forestry and state park information program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies, and other organizations, groups, and agencies who published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. In this way forestry and state park information is given widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

During the year the following publications and printed materials were used by the State Commission of Forestry:

South Carolina State Parks Welcome You—folder

State Park Vacation Cabins—folder

Progress Report, \$300,000 Bond Issue for Capital Improvements of State Park Facilities as of Jan. 15, 1955—folder

Forest Insects and Diseases of South Carolina Trees—booklet  
published jointly by S. C. State Commission of Forestry  
and Clemson College Extension Service



Forestry and Park Notes—1954 Conservation Week and Arbor Day issue

Report of the State Commission of Forestry for the year July 1, 1953 to June 30, 1954

Little Fires Do Big Damage—reprint of published article

Lend Nature a Hand—Protect Little Trees—1955 Wall Calendar

Lend Nature a Hand—Protect Little Trees—photo reprint

For Our Children's Future and Our Nation's Strength, Lend Nature a Hand, Protect Little Trees—pocket calendar

Smokey Bear Vacation Reading Club—certificate

Smokey Bear Vacation Reading Club—membership card

Our Children's Future—Protect Little Trees—printed book match covers

For Your Future and Our Nation's Strength, Protect Little Trees, Prevent Woods Fires—art work and message on state schoolbook covers in cooperation with State School Book Commission.

## **SIGN AND WOODWORKING SHOP**

The Commission's sign and woodworking shop continued to produce routed letter signs, picnic chairs and tables, fair exhibits, and other necessary cabinet and carpentry work. The distinctive routed letter signs identified the various forestry and state park installations with the Commission of Forestry. The Commission's fair exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

## **SOUTH CAROLINA TREE FARMS SYSTEM**

The South Carolina Tree Farms System is part of a program designed to recognize the many deserving landowners who practice good forestry. To become a Tree Farmer a landowner must prevent woods fires and take all reasonable precautions against them. In addition, he must apply sound cutting practices to existing timber and must plant areas that will not reseed naturally. After a Tree Farmer is certified, his property is marked with a Tree Farm sign. His neighbors and people passing by may see good forestry practices and come to understand forest values. Tree Farms are also effective places to hold demonstrations on all phases of forestry.

From 1946 to 1954 the Tree Farm movement was sponsored in South Carolina by the State Commission of Forestry and the Clemson College Extension Service, with financial assistance from the Southern Pine Association, and encouraged nationally by American Forest Products Industries, Inc.

In 1954 The Southern Pine Association withdrew as a co-sponsor of the program. The South Carolina Tree Farms System was reorganized and is now sponsored by the S. C. Forest Industries Committee, which is the State representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. As of June 30, 1955 the membership of the S. C. Tree Farm Committee was as follows:

*Chairman* Vern Cutler, Argent Lumber Company, Hardeeville.

*Members* Joe Youorski, The Campion Paper and Fibre Company, Newberry.

Harvey Rhettberg, Poinsett Lumber and Mfg. Co.,  
Pickens.

H. F. Lathrop, Lightsey Brothers, Miley.

H. F. Bishop, Consulting Forester, Marion.

C. P. Key, Lodge.

T. M. Folger, Taylor-Colquitt Company, Spartanburg.

Charles H. Flory, State Forester, Columbia.

D. W. Watkins, Clemson Agricultural College, Clemson.

NOTE: Assistant State Forester John Witherspoon was asked to continue to serve as Secretary to the State Tree Farm Committee.

As of June 30, 1955, there were 152 Tree Farms in the State comprising 1,206,225 acres. The following landowners qualified for certification as Tree Farmers under the South Carolina Tree Farms System this year:

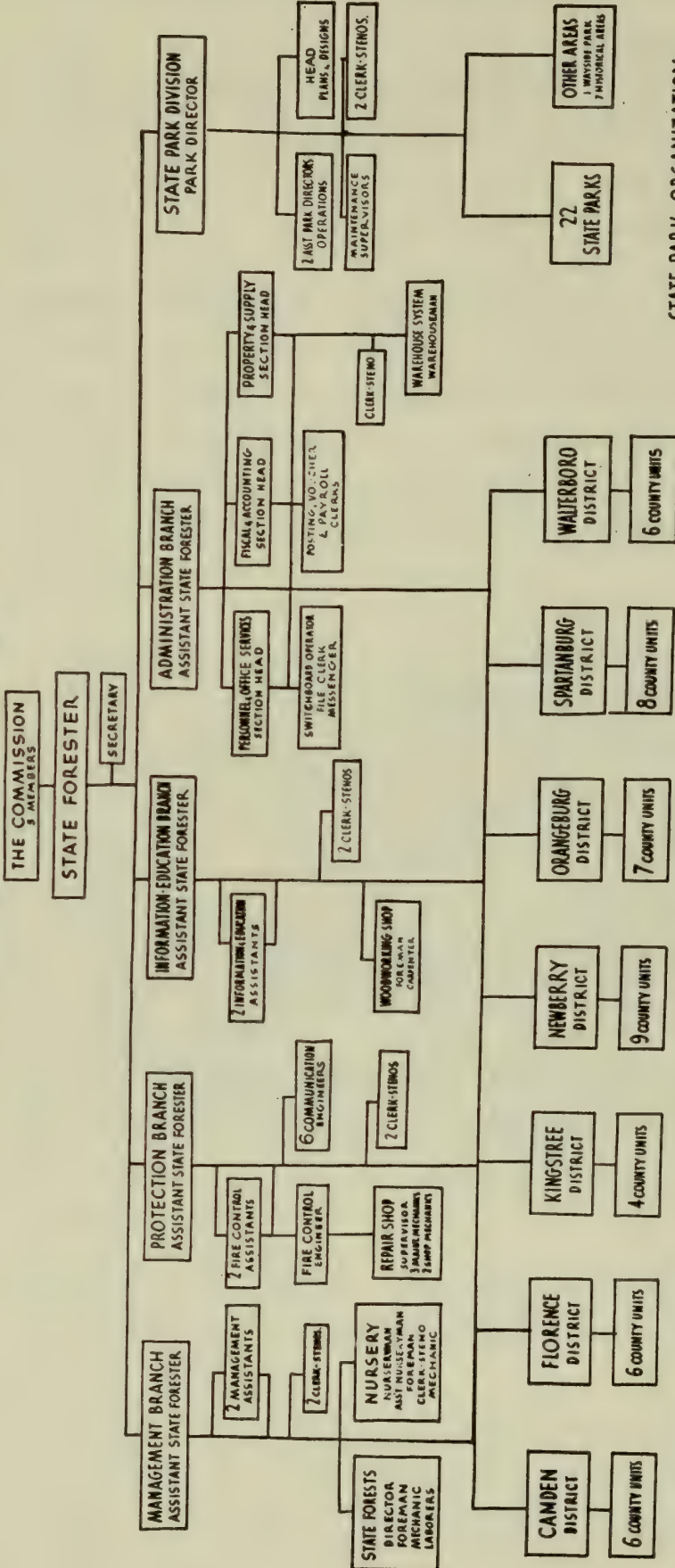


# **TREE FARM CERTIFICATION**

<i>Name—County</i>	<i>Acreage</i>
H. F. Bishop & C. H. Schaeffer—Richland.....	43
Vance Perritt—Marion.....	60
F. C. Edge—Horry.....	95
A. D. Strickland—Horry.....	100
H. L. Bellamy—Horry.....	25
West Virginia Pulp & Paper Co.—Additional acreage.....	1,963
J. M. Huber Corporation—Aiken.....	1,854
J. Ansel Caughman—Lexington.....	1,200
G. E. King—Chesterfield.....	950
R. D. King—Chesterfield.....	270
Marlin H. Bruner and W. C. Nettles—Newberry.....	415
Marlin H. Bruner—Greenwood.....	104
A. C. Flora—Richland.....	204
St. Clair Davis—Marion.....	250
Frank H. Covington—Marlboro.....	100
Helen S. Tiencken—Newberry.....	297
Stewart C. Hope, Agent—Newberry.....	505
Dr. R. N. Kennedy—Newberry.....	264
Mrs. Sarah Goggans—Newberry.....	562
T. C. Jeter—Newberry.....	108
Dr. W. G. Gamble, Jr.—Williamsburg.....	242
Dr. W. G. Gamble, Jr.—Williamsburg.....	600
J. L. Mason—McCormick.....	1,211
Atlantic Coast Line RR Co.—Charleston.....	376
W. H. Bradford—Sumter.....	200

# SOUTH CAROLINA STATE COMMISSION OF FORESTRY

## ORGANIZATION CHART



### STATE PARK ORGANIZATION

- REGULAR
  - SUPERINTENDENT
  - RANGER
  - FOREMAN
  - LABORERS
- SEASONAL
  - LIFE GUARDS
  - BATH HOUSE OPERATORS
  - CONCESSIONAIRE

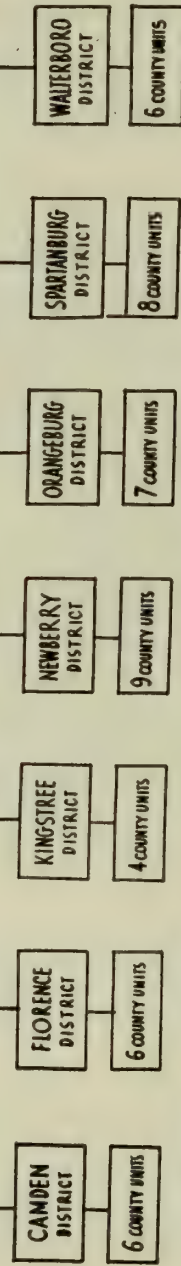
### COUNTY UNIT ORGANIZATION

COUNTY FORESTRY BOARD (MEMBERS 5)

- RANGER
- DISPATCHER
- WARDENS
- TRACTOR OPERATORS
- FLEXIBLE CREWS
- POWERMEN
- VOLUNTEER CREWS

### DISTRICT OFFICE ORGANIZATION

- DISTRICT FORESTER
- 2 ASSISTANT FORESTERS
- DISTRICT RANGER
- CLERK-STENOGRAPHER





## ADMINISTRATION

The Commission's administrative Branch is responsible for coordinating the activities of both central and field offices on fiscal and accounting, property and supply, and personnel and office services for both Divisions of the Commission—Forestry and State Parks.

### **Personnel Accident and Injury**

During the year 66 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

### **Automotive Accidents**

Continued emphasis was placed on the careful operation of the 166, Commission-owned motor vehicles and privately owned vehicles operated on Commission business through specific training and affiliation with the National Safety Council.

On the eight automotive accidents which occurred during the fiscal year, five were minor in nature. A review of the employees driving records indicates that 125 of the 319 drivers have operated Commission vehicles or privately owned vehicles on official business for a period of one to five years without an accident; 125 for six to ten years; 48 for eleven to fifteen years; and 21 for more than sixteen years.

### **Commission Purchasing**

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and fiscal procedure. A total of 1,781 requisitions were received and 1,761 purchase orders issued during the year.

Visual inventories were made during the year of all equipment in use by both the Divisions of Forestry and State Parks. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,279,472. In addition, the Commission has real property and improvements now estimated to be worth \$12,812,245.

### **Personnel**

Personnel employed by the Commission continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Thirteen percent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

### **Training**

The Commission of Forestry strives at all times to improve each and every activity through constant personnel training and supervision. A series of individual on-the-job training sessions were conducted in each district office which proved highly successful and resulted in improved performance in all phases of administrative work. Subjects covered included budget preparation and fiscal control, property accountability, personnel records, leave, retirement and insurance, office administration and procedures.



## APPENDIX

## FINANCIAL STATEMENT

## SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1954-June 30, 1955

## RECEIPTS

*Division of Forestry—*

Balance from 1953-54—Federal Fund .....	\$ 5.72	
Balance from 1953-54—Radio Comm. Fund .....	2,804.41	
Balance from 1953-54—For Purchase of Short Wave Radio Equipment .....	4,362.66	
State Appropriation—Operating .....	1,086,542.00	
Federal Funds—Protection C-M Law, Sec. 2 .....	267,241.00	
Federal Funds—Reforestation C-M Law, Sec. 4 and N-D .....	9,500.00	
Federal Funds—Cooperative Farm Management .....	18,000.00	
Federal Funds — 12 Mile Creek (Pickens) Watershed .....	10,689.18	
Federal Funds—Civil Defense for Radio Equip- ment .....	58,132.70	
Nursery .....	71,956.88	
State Forests .....	29,804.05	
Marking and Tallying Timber .....	6,793.48	
Counties and Timber Firms .....	7,521.54	
Miscellaneous Receipts .....	132.30	
Radio Communication Project .....	22,949.72	
		<hr/>
Total Receipts—Forestry .....		\$ 1,596,435.64
Less Receipts Deposited to Cr. State Rev- enue Account .....		108,686.71
		<hr/>
Total Receipts Available for Expenditure .....		\$ 1,487,748.93
Total Expenditures .....		1,468,968.03
		<hr/>
Balance—Division of Forestry .....		\$ 18,780.90*

*Division of State Parks—*

Balance from 1953-54—Hunting Island Deposits \$	4,937.41
Balance from 1953-54—Myrtle Beach Fishing Pier .....	428.24
Balance from 1953-54—Pleasant Ridge Park .....	197.36
Balance from 1953-54—Greenwood Park .....	11,869.64
Appro. 1951-52—Earmarked for Colored Park .....	49,950.00
Appro. 1952-53—Earmarked for Andrew Jack- son Park .....	602.43

State Appropriation—Operating .....	338,329.00
State Appropriation—Historical Areas .....	4,044.00
Forests and Parks Fund—Hunting Island De- posits .....	1,220.00
Myrtle Beach Fishing Pier .....	51,193.13
Greenwood Park .....	17,638.23
Cabin Rentals .....	21,186.43
Concession Stands .....	3,545.58
Bathhouse Receipts .....	32,688.03
Boat Rentals .....	3,357.50
Group Camps .....	11,538.04
Picnic Shelters and Recreation Bldgs. ....	1,737.67
Timber Sales .....	10,715.00
Miscellaneous Receipts .....	1,068.28
Sinking Fund Loan for Park Improvements....	300,000.00

Total Receipts—Parks—Available for Ex- penditure .....	\$ 866,245.97
Total Expenditures .....	774,366.29
Balance—Division of State Parks .....	\$ 91,879.68†

## EXPENDITURES

Administrative and Technical .....	\$ 377,207.69
State Forest Nursery .....	70,915.13
State Forest Projects .....	45,933.51
Fire protection .....	974,911.70
Total—Division of Forestry .....	\$ 1,468,968.03
Total—Division of State Parks .....	774,366.29
Grand Total—Expenditures .....	\$ 2,243,334.32

## RECAPITULATION

*Funds Available—*

Division of Forestry .....	\$ 1,487,748.93
Division of State Parks .....	866,245.97
	2,353,994.90

*Expenditures—*

Division of Forestry .....	\$ 1,468,968.03
Division of State Parks .....	774,366.29
	—2,243,334.32
Balance .....	\$110,660.58*†



* Forestry : Radio Communication .....	\$ 18,780.90
† Parks : Appro.—Operating .....	.86
Appro.—Historical Areas .....	.61
Appro.—Earmarked for Colored Park .....	49,950.00
Hunting Island Deposits .....	2,401.52
Greenwood Park .....	4,997.65
M. B. Fishing Pier .....	1,612.94
Parks Improvements .....	28,897.91
Parks Notes & Interest .....	4,018.19
	<hr/>
	\$ 110,660.58

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1954-55

UNIT	Organized Personnel					Volunteer Personnel		Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Total	Organized Volunteers	Other Volunteers	
Abbeville .....	1	2	..	1	4	..	167	171
Aiken .....	1	4	2	5	12	..	732	744
Allendale .....	1	2	1	3	7	..	233	240
Anderson .....	1	2	1	3	7	30	246	283
Bamberg .....	1	2	1	2	6	30	448	484
Barnwell .....	1	2	2	2	7	371	610	988
Beaufort .....	1	3	2	3	9	224	211	444
Berkeley .....	1	4	2	4	11	..	1,070	1,081
Calhoun .....	1	2	1	2	6	..	171	177
Charleston .....	1	4	1	3	9	..	708	717
Cherokee .....	1	1	..	1	3	5	277	285
Chester .....	1	3	..	1	5	..	586	591
Chesterfield .....	1	3	1	4	9	..	397	406
Clarendon .....	1	3	2	3	9	5	429	443
Colleton .....	1	4	2	5	12	..	1,592	1,604
Darlington .....	1	2	..	3	6	4	928	938
Dillon .....	1	2	1	2	6	..	471	477
Dorchester .....	1	3	2	3	9	..	567	576
Edgefield .....	1	2	..	1	4	..	194	198
Fairfield .....	1	4	1	3	9	..	717	726
Florence .....	1	4	2	4	11	..	790	801
Georgetown .....	1	4	2	4	11	3	948	962
Greenville .....	1	3	..	4	8	..	1,032	1,040
Greenwood .....	1	2	..	2	5	9	210	224
Hampton .....	1	3	1	3	8	..	811	819
Horry .....	1	5	2	4	12	..	1,424	1,436
Jasper .....	1	3	1	2	7	..	883	890
Kershaw .....	1	3	2	6	12	..	640	652
Lancaster .....	1	3	1	2	7	1	474	482
Laurens .....	1	3	..	2	6	..	541	547
Lee .....	1	2	1	3	7	..	398	405
Lexington .....	1	3	2	5	11	..	1,213	1,224
McCormick .....	1	1	1	1	4	3	127	134
Marion .....	1	3	2	3	9	..	694	703
Marlboro .....	1	3	1	3	8	1	285	294
Newberry .....	1	2	1	2	6	..	436	442
Oconee .....	1	2	..	3	6	12	365	383
Orangeburg .....	1	5	2	5	13	..	1,076	1,089
Pickens .....	1	3	..	4	8	..	262	270
Richland .....	1	5	1	4	11	1	571	583
Saluda .....	1	2	..	1	4	2	250	256
Spartanburg .....	1	3	1	4	9	13	472	494
Sumter .....	1	3	1	3	8	3	931	942
Union .....	1	2	1	1	5	15	246	266
Williamsburg .....	1	5	2	4	12	658	777	1,447
York .....	1	2	1	4	8	36	562	606
TOTALS .....	46	133	50	137	366	1,426	27,172	28,964



TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1954—JUNE 30, 1955

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	470	6.7	7,399.0	15.7
August .....	443	6.3	7,425.6	16.8
September .....	450	6.4	5,314.8	11.8
October .....	532	7.6	3,644.1	6.8
November .....	335	4.8	3,196.8	9.5
December .....	598	8.5	8,004.9	13.4
January .....	477	6.8	8,434.0	17.7
February .....	897	12.8	13,279.9	14.8
March .....	1,842	26.3	89,816.8	48.8
April .....	502	7.1	8,026.8	16.0
May .....	347	4.9	3,278.0	9.4
June .....	129	1.8	964.8	7.5
TOTALS .....	7,022	100.0	158,785.5	22.6

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1954-55

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Abbeville	8	48.5	1	4.2	2	12.6	8	42.4	9	94.8	1	2.7	..	....	1	14.0	22	170.7
Aiken	4	37.0	1	26.0	3	9.8	78	697.2	67	1953.5	53	1097.6	..	....	64	239.5	274	4072.1
Allendale	1	4.0	1	2.0	4	1109.0	28	157.5	33	5392.0	43	200.5	7	69.0	5	22.0	125	6989.0
Anderson	..	....	..	....	1	0.8	29	269.6	35	94.3	1	2.0	2	3.1	9	24.7	78	398.5
Bamberg	..	....	3	1.5	..	....	29	448.5	54	647.5	25	505.7	11	352.0	4	4.2	124	1959.4
Barnwell	..	....	3	22.6	3	19.2	57	478.3	49	190.2	25	174.5	5	36.2	4	137.4	146	1058.4
Beaufort	..	....	1	9.0	3	15.1	9	71.7	9	31.1	90	4557.9	..	....	5	438.5	117	5123.3
Berkeley	5	20.5	1	76.0	3	21.6	37	247.0	20	169.6	281	4887.4	6	58.0	14	63.4	367	5543.5
Calhoun	2	3.4	1	0.4	2	80.2	22	53.3	3	126.2	19	455.3	2	5.4	..	....	51	724.2
Charleston	6	300.6	9	136.5	7	444.8	56	1313.0	29	1185.0	60	2856.7	6	206.7	..	....	177	6651.7
Cherokee	..	....	3	6.0	..	....	13	43.8	4	46.0	9	86.3	..	....	3	19.0	32	201.1
Chester	2	18.0	8	56.0	2	3.5	18	131.7	11	58.5	8	95.4	..	....	13	148.0	64	570.1
Chesterfield	11	82.4	4	43.0	2	10.1	15	63.6	28	2067.5	37	555.7	6	28.5	9	119.1	112	2969.9
Clarendon	..	....	..	....	11	287.1	36	423.9	29	628.7	137	4368.4	7	127.2	7	54.0	227	5889.3
Colleton	10	81.2	3	9.0	4	37.0	42	297.8	97	1877.1	173	3784.7	15	151.2	8	181.5	352	6419.5
Darlington	5	87.0	2	18.0	5	19.7	56	1363.6	25	322.6	21	98.9	9	177.3	9	6.9	132	2094.0
Dillon	1	1.0	8	91.1	4	16.1	27	95.5	29	249.5	37	186.3	10	373.6	9	3.8	125	1016.9
Dorchester	1	3.0	3	22.0	5	171.0	57	1319.6	47	647.3	65	3857.7	14	251.0	4	39.0	196	6310.6
Edgefield	1	0.9	..	....	..	....	14	74.3	9	59.2	2	11.1	3	24.0	4	17.2	33	186.7
Fairfield	5	30.0	18	257.5	6	43.1	52	413.5	9	57.2	7	34.1	4	18.0	8	49.7	109	903.1
Florence	5	29.5	4	651.6	4	19.1	106	963.3	74	865.3	113	1423.5	12	66.8	5	156.6	323	4175.7
Georgetown	8	294.6	1	14.0	4	1.8	44	293.5	20	6631.7	75	674.7	7	244.8	10	155.3	169	8310.4
Greenville	2	0.9	1	0.3	10	26.2	111	290.4	47	255.7	10	304.0	3	5.0	57	221.9	241	1104.4
Greenwood	1	0.5	1	4.0	2	2.3	17	84.9	10	52.9	2	2.1	3	4.8	7	28.6	43	180.1
Hampton	6	52.3	6	27.6	3	7034.0	57	650.8	21	998.3	86	3422.8	6	56.7	15	186.6	200	12429.1
Horry	5	15.7	1	8.4	12	157.2	87	1272.4	93	3570.2	210	11882.3	13	762.7	35	841.3	456	18510.2
Jasper	3	25.1	5	148.0	5	85.0	44	570.2	23	3104.7	149	12121.6	6	193.5	6	90.2	241	16338.3
Kershaw	10	125.2	3	24.6	5	165.0	42	407.6	22	305.2	24	1185.8	8	86.1	3	7.9	116	2307.4
Lancaster	3	17.0	2	6.0	1	1.8	18	280.7	14	39.2	20	272.1	2	13.6	3	18.6	58	608.4
Laurens	4	52.8	14	174.3	..	....	15	123.4	17	123.8	6	30.8	2	102.6	4	18.6	62	626.3
Lee	..	....	..	....	3	26.4	42	926.0	20	534.0	13	334.4	9	400.2	4	8.9	91	2014.3
Lexington	13	36.3	5	5.2	9	300.5	53	232.6	48	237.5	21	265.5	3	48.2	6	38.6	158	1486.4
Marion	2	35.0	6	73.8	8	45.2	13	237.0	12	114.8	56	2131.9	1	198.0	2	2.2	100	2837.9
Marlboro	..	....	..	....	3	20.6	24	93.6	19	111.6	94	1502.0	9	25.5	3	12.3	152	1765.6
McCormick	1	1.8	2	2.3	..	....	15	45.7	4	3.9	3	21.5	1	14.0	1	1.0	27	90.2



Newberry .....	2	3.0	2	69.5	1	76.0	20	59.4	11	145.0	1	0.2	1	9.0	5	49.4	43	411.6
Oconee .....	3	9.7	8	29.1	..	...	18	35.6	27	111.9	20	99.3	2	2.1	14	9.6	92	297.3
Orangeburg .....	4	44.3	1	2.5	6	111.9	107	2074.9	36	689.7	300	8413.2	11	225.9	11	299.3	476	11861.7
Pickens .....	5	3.0	7	15.3	1	0.1	22	29.8	21	174.2	16	198.2	2	12.0	16	31.1	90	463.7
Richland .....	1	0.5	31	253.6	14	157.4	79	968.2	50	359.1	64	1077.1	3	217.7	9	49.6	252	3083.2
Saluda ....	3	6.5	..	...	3	3.9	18	24.6	8	41.4	1	12.0	3	14.1	2	1.7	38	104.2
Spartanburg .....	2	2.3	4	12.5	4	17.5	38	254.2	23	358.9	16	11.4	2	6.4	10	103.8	99	767.0
Sumter .....	2	21.0	9	128.4	3	25.3	68	1484.8	40	533.4	51	664.1	7	25.9	9	38.6	189	2921.5
Union .....	4	12.0	3	216.5	2	12.0	19	246.0	4	51.0	6	22.5	5	53.5	5	26.0	48	639.5
Williamsburg .....	8	278.2	2	12.0	14	98.3	39	614.8	62	851.3	154	3643.1	6	29.7	6	13.5	291	5535.9
York .....	7	139.8	3	8.1	2	6.5	37	210.8	33	210.0	5	13.8	1	0.2	16	74.0	104	663.2
TOTALS .....	166	1924.5	189	2668.4	186	10689.7	1836	20401.0	1355	36372.5	2600	77548.8	237	4895.7	453	4284.9	7022	158785.5

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1954-55

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL NO.
Abbeville .....	..	18	4	..	..	22
Aiken .....	17	210	42	4	1	274
Allendale .....	2	105	14	1	3	125
Anderson .....	3	69	5	1	..	78
Bamberg .....	5	89	25	5	..	124
Barnwell .....	4	126	15	1	..	146
Beaufort .....	8	65	37	4	3	117
Berkeley .....	23	227	110	7	..	367
Calhoun .....	3	35	11	2	..	51
Charleston .....	3	100	63	9	2	177
Cherokee .....	..	29	3	..	..	32
Chester .....	8	45	11	..	..	64
Chesterfield .....	7	74	30	..	1	112
Clarendon .....	19	120	76	12	..	227
Colleton .....	19	224	100	8	1	352
Darlington .....	25	82	20	4	1	132
Dillon .....	41	70	12	2	..	125
Dorchester .....	21	111	56	7	1	196
Edgefield .....	6	22	5	..	..	33
Fairfield .....	1	91	15	2	..	109
Florence .....	24	226	67	5	1	323
Georgetown .....	22	117	25	4	1	169
Greenville .....	58	163	18	2	..	241
Greenwood .....	1	35	7	..	..	43
Hampton .....	19	124	48	6	3	200
Horry .....	47	228	144	33	4	456
Jasper .....	17	126	84	9	5	241
Kershaw .....	10	70	32	4	..	116
Lancaster .....	7	40	10	1	..	58
Laurens .....	1	48	13	..	..	62
Lee .....	1	47	39	4	..	91
Lexington .....	14	128	13	3	..	158
Marion .....	6	72	17	2	3	100
Marlboro .....	10	105	34	3	..	152
McCormick .....	1	23	3	..	..	27
Newberry .....	4	32	7	..	..	43
Oconee .....	13	72	7	..	..	92
Orangeburg .....	..	246	209	21	..	476
Pickens .....	19	64	7	..	..	90
Richland .....	20	171	58	3	..	252
Saluda .....	7	27	4	..	..	38
Spartanburg .....	14	69	15	1	..	99
Sumter .....	7	132	44	6	..	189
Union .....	..	38	8	2	..	48
Williamsburg .....	52	160	65	13	1	291
York .....	11	82	11	..	..	104
TOTALS .....	600	4557	1643	191	31	7022



Abbeville	2	26	2	11.0	3	5.0	3	14.3	1	25.3	1	3.0	11	62.0	2	16.7	3	16.1	5	76.7	19	150.2	10	40.3	
Aiken	25	359.6	24	164.8	36	77.4	24	300.7	11	30.1	24	238.9	9	62.0	22	82.5	51	2258.8	22	306.8	19	150.2	10	40.3	
Allendale	3	23.0	3	34.0	8	8.0	14	16.0	9	84.0	14	79.5	2	12.8	20	131.0	46	6540.5	1	5.0	5	26.0	3	9.0	
Anderson	4	9.9	12	13.7	13	17.5	1	214.1	2	6.8	1	3.0	2	12.8	3	8.2	10	31.6	9	44.3	15	36.3	1	0.3	
Bamberg	9	182.5	9	308.5	8	379.0	1	0.5	6	57.5	15	115.9	6	39.5	21	111.5	40	554.7	5	194.3	1	1.0	2	14.5	
Barnwell	11	19.4	7	131.4	8	55.8	30	23.6	6	43.4	30	146.3	16	48.4	18	64.3	35	505.0	2	11.8	2	6.8	1	2.2	
Beaufort	3	88.0	2	128.0	2	50.1	2	12.5	14	112.0	10	91.8	7	69.0	10	115.9	51	4211.5	8	203.0	3	36.5	2	5.0	
Berkeley	16	282.4	23	428.1	14	20.0	16	86.4	21	212.5	23	201.0	26	287.2	76	1381.7	114	1837.5	22	554.4	14	250.3	2	2.0	
Calhoun	2	4.5	5	8.3	4	105.0	4	9.6	6	15.0	4	43.4	5	98.2	6	45.4	11	302.0	4	89.2	1	1.2	2	2.4	
Charleston	5	86.2	11	254.7	8	366.2	8	121.5	11	66.6	7	123.5	18	430.0	17	369.8	59	4147.1	13	400.7	12	85.4	6	200.0	
Cherokee	5	14.0	2	3.0	9	34.3	6	67.5	1	12.0	7	.....	2	.....	2	5.0	5	20.5	1	40.0	1	4.8	.....	.....	
Chester	14	111.1	5	36.0	10	128.8	9	19.6	2	5.0	.....	.....	2	5.1	3	14.5	6	36.9	6	99.5	5	12.6	2	102.0	
Chesterfield	13	28.0	7	75.7	1	38.2	1	0.4	.....	.....	4	43.0	5	32.5	15	193.0	36	223.1	10	179.0	10	149.0	3	8.0	
Clarendon	21	330.4	8	354.5	5	40.0	6	144.0	5	35.5	35	1511.5	20	353.0	51	453.7	62	2400.7	7	55.0	6	210.0	1	1.0	
Colleton	10	263.9	22	435.0	12	126.5	3	24.8	17	92.0	19	99.8	28	146.4	64	1076.3	131	3808.2	23	246.6	12	50.0	11	50.0	
Darlington	12	531.7	8	33.9	16	794.4	6	28.3	2	16.0	14	87.2	5	40.7	7	33.4	32	411.6	18	75.7	11	27.1	1	14.0	
Dillon	5	23.2	4	7.0	2	440.2	7	16.2	5	20.1	19	23.7	26	132.2	7	25.0	25	292.2	4	6.1	6	10.0	5	21.0	
Dorchester	11	179.0	13	101.7	4	31.0	1	4.0	13	294.4	15	350.1	9	101.0	27	466.0	82	4601.3	14	145.0	5	14.1	2	23.0	
Edgefield	5	18.1	1	23.0	2	19.5	7	15.6	2	7.5	1	1.0	.....	.....	1	0.6	5	43.1	2	15.7	6	29.6	1	3.0	
Fairfield	18	154.7	8	26.0	14	240.8	16	165.3	4	27.0	5	12.2	3	5.0	8	34.0	18	116.3	9	48.3	6	73.5	.....	.....	
Florence	25	205.1	25	169.4	14	61.5	17	145.3	13	188.0	49	274.2	19	144.3	48	341.7	84	2411.5	12	116.5	14	92.3	3	25.9	
Georgetown	8	305.0	14	143.5	8	30.3	8	9.5	7	46.7	17	79.1	17	81.1	16	100.3	43	7351.4	22	112.2	7	48.1	2	3.2	
Greenville	12	55.8	25	52.1	31	146.9	47	65.4	13	173.9	16	35.0	14	26.0	9	21.9	29	376.6	26	90.7	19	60.1	.....	.....	
Greenwood	5	5.8	1	2.0	4	24.2	12	53.2	2	.....	2	5.7	2	.....	2	0.6	8	20.8	7	49.0	3	18.8	.....	.....	
Hampton	3	43.0	14	99.2	7	18.4	15	72.7	26	327.2	11	329.7	20	567.3	25	137.7	59	10560.2	7	41.1	6	41.5	7	191.1	
Horry	31	664.6	54	2541.1	12	93.4	15	104.0	13	121.6	44	1034.9	22	642.7	70	1753.2	125	9696.1	33	1474.9	22	332.4	15	51.3	
Jasper	3	4.2	12	291.2	10	211.9	10	41.8	21	407.7	14	165.0	36	3444.5	20	268.4	96	10966.6	16	509.0	3	28.0	.....	.....	
Kershaw	14	294.1	2	3.0	9	115.5	10	77.0	2	19.0	6	10.4	7	43.9	11	109.9	32	997.2	12	580.7	7	28.7	4	28.0	
Lancaster	3	10.0	4	5.2	15	318.3	7	5.2	2	20.0	2	4.0	.....	.....	2	3.0	9	164.0	4	62.7	10	16.0	.....	.....	
Laurens	4	29.2	5	60.9	8	43.1	16	193.3	1	23.0	.....	.....	.....	.....	8	77.6	8	57.8	6	17.1	6	124.3	.....	.....	
Lee	7	269.2	5	30.9	12	128.5	6	60.4	4	8.8	7	143.9	2	45.0	8	451.0	26	501.5	5	64.0	6	304.0	3	7.1	
Lexington	20	63.0	10	14.2	14	41.5	11	70.1	8	13.7	17	124.6	.....	.....	18	71.6	27	261.6	21	697.9	10	124.2	2	4.0	
Marion	14	1070.6	15	956.0	5	12.0	7	38.5	4	3.4	11	67.9	4	19.2	9	62.6	23	547.1	3	22.5	3	14.0	2	24.1	
Marlboro	4	26.8	8	17.9	7	49.8	12	81.2	5	42.2	20	372.6	28	155.8	27	280.1	33	689.4	3	26.6	2	3.2	3	20.0	
McCormick	2	5.0	1	0.4	4	32.4	4	20.4	3	2.1	2	14.0	.....	.....	.....	.....	5	4.4	2	3.6	1	2.0	2	5.9	
Newberry	2	4.4	2	1.3	5	36.5	11	42.6	4	21.8	2	13.5	.....	.....	2	8.2	5	154.6	6	122.9	4	5.8	.....	.....	
Oconee	5	11.0	8	16.4	10	14.4	16	21.8	4	40.0	4	8.3	2	5.0	3	27.8	9	60.6	18	64.4	13	27.6	.....	.....	
Orangeburg	24	527.0	14	276.5	16	172.6	14	365.4	15	135.9	55	1102.7	46	774.9	93	3144.9	161	4701.1	23	348.1	11	298.4	4	14.2	
Pickens	2	0.9	5	2.8	13	28.9	20	25.5	7	12.0	.....	.....	1	0.8	1	2.5	14	157.5	19	225.4	6	7.2	2	0.2	
Richland	24	326.6	9	48.8	17	125.7	27	269.0	10	71.6	27	150.8	20	135.9	31	243.9	35	1207.2	18	107.2	22	355.5	12	41.0	
Saluda	7	10.2	3	6.9	4	3.7	5	3.9	1	0.8	2	1.0	1	12.0	3	2.7	5	27.9	2	31.4	3	1.5	2	2.2	
Spartanburg	7	12.6	8	17.8	15	70.6	31	147.5	2	31.0	1	1.5	.....	.....	3	17.0	10	252.8	10	140.7	10	54.5	2	21.0	
Sumter	8	151.3	3	12.8	13	81.6	20	118.1	10	95.8	24	509.6	14	162.4	27	250.4	50	1387.1	11	120.2	7	22.8	2	9.4	
Union	7	65.0	6	32.0	4	47.0	8	209.0	5	140.0	1	3.0	.....	.....	3	13.5	4	28.0	9	99.0	.....	.....	1	3.0	
Williamsburg	19	390.0	10	37.8	6	207.0	8	22.5	15	87.7	21	373.6	21	272.6	73	1240.0	106	2767.7	9	58.2	5	65.3	3	12.6	
York	16	135.5	4	7.2	16	221.4	16	95.9	2	0.2	2	5.1	5	4.6	6	20.9	14	108.4	13	43.7	7	17.4	3	2.9	
TOTALS	470	7399.0	443	7425.6	532	5314.8	3644.1	335	3196.8	598	8004.9	477	8434.0	897	13279.9	1842	89816.8	502	8026.8	347	3278.0	129	964.8	.....	.....

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1954-55

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	167	2.4	1,924.5	11.5
Railroads .....	189	2.7	2,668.4	14.1
Campers .....	185	2.6	10,689.7	57.8
Smokers .....	1,836	26.1	20,401.0	11.1
Debris Burning .....	1,355	19.3	36,372.5	26.8
Incendiary .....	2,600	37.0	77,548.8	29.8
Lumbering .....	237	3.4	4,895.7	20.7
Miscellaneous .....	453	6.5	4,284.9	9.5
TOTALS .....	7,022	100.00	158,785.5	22.6

TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1950-51	1951-52	1952-53	1953-54	1954-55	Average For 5-Year Period
Lightning .....	0.6	1.5	1.6	0.6	2.4	1.3
Railroads .....	2.3	3.1	1.3	1.7	2.7	2.2
Campers .....	2.7	2.3	2.8	2.4	2.6	2.6
Smokers .....	25.4	22.9	24.6	25.6	26.1	25.1
Debris Burning .....	19.1	19.5	19.6	20.9	19.3	19.7
Incendiary .....	38.6	41.5	38.6	41.0	37.0	39.2
Lumbering .....	1.5	2.0	1.9	2.5	3.4	2.3
Miscellaneous .....	7.4	7.2	9.6	5.3	6.5	7.1



TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1954-55

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	22	170.7	.10	7.8
Aiken .....	450,200	274	4,072.1	.90	14.9
Allendale .....	131,400	125	6,989.0	5.32	55.9
Anderson .....	173,700	78	398.5	.23	5.1
Bamberg .....	126,000	124	1,959.4	1.56	15.8
Barnwell .....	147,800	146	1,058.4	.72	7.2
Beaufort .....	188,400	117	5,123.3	2.72	43.8
Berkeley .....	398,974	367	5,543.5	1.39	15.1
Calhoun .....	123,500	51	724.2	.59	14.2
Charleston .....	271,994	177	6,651.7	2.45	37.6
Cherokee .....	127,800	32	201.1	.16	6.3
Chester .....	260,023	64	570.1	.22	8.9
Chesterfield .....	310,000	112	2,969.9	.96	26.5
Clarendon .....	228,500	227	5,889.3	2.58	25.9
Colleton .....	465,000	352	6,419.5	1.38	18.2
Darlington .....	208,500	132	2,094.0	1.00	15.9
Dillon .....	144,100	125	1,016.9	.71	8.1
Dorchester .....	268,200	196	6,310.6	2.35	32.2
Edgefield .....	172,641	33	186.7	.11	5.7
Fairfield .....	338,957	109	903.1	.27	8.3
Florence .....	293,900	323	4,175.7	1.42	12.9
Georgetown .....	415,600	169	8,310.4	2.00	49.2
Greenville .....	267,800	241	1,104.4	.41	4.6
Greenwood .....	198,913	43	180.1	.09	4.2
Hampton .....	239,500	200	12,429.1	5.19	62.1
Horry .....	557,600	456	18,510.2	3.32	40.6
Jasper .....	280,000	241	16,338.3	5.84	67.8
Kershaw .....	336,500	116	2,307.4	.69	19.9
Lancaster .....	199,400	58	608.4	.31	10.5
Laurens .....	244,735	62	626.3	.26	10.1
Lee .....	110,600	91	2,014.3	1.82	22.1
Lexington .....	291,500	158	1,486.4	.51	9.4
Marion .....	224,700	100	2,837.9	1.26	28.4
Marlboro .....	150,600	152	1,765.6	1.17	11.6
McCormick .....	144,840	27	90.2	.06	3.3
Newberry .....	205,003	43	411.6	.20	9.6
Oconee .....	259,252	92	297.3	.11	3.2
Orangeburg .....	318,800	476	11,861.7	3.72	24.9
Pickens .....	190,100	90	463.7	.24	5.2
Richland .....	289,500	252	3,083.2	1.07	12.2
Saluda .....	149,956	38	104.2	.07	2.7
Spartanburg .....	208,300	99	767.0	.37	7.7
Sumter .....	205,400	189	2,921.5	1.42	15.5
Union .....	157,894	48	639.5	.41	13.3
Williamsburg .....	429,800	291	5,535.9	1.29	19.0
York .....	226,300	104	663.2	.29	6.4
TOTALS .....	11,300,008	7,022	158,785.5	1.41	22.6

TABLE 9—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1950-51 .....	11,300,008	6,643	147,840.3	1.31	22.3
1951-52 .....	11,300,008	4,982	108,450.1	0.96	21.8
1952-53 .....	11,300,008	4,928	78,193.8	0.69	15.9
1953-54 .....	11,300,008	6,532	119,149.2	1.05	18.2
1954-55 .....	11,300,008	7,022	158,785.5	1.41	22.6
5-Year Average .....	11,300,008	6,021	122,483.8	1.08	20.3



TABLE 10—SEEDLING DISTRIBUTION BY LAND CLASSIFICATION

Land Ownership	Loblolly	Slash	Longleaf	Arizona Cypress	Red Cedar	Other Species	Totals
Farms .....	6,693,250	5,554,450	288,150	85,800	73,800	16,100 Y P 15,100 S L	12,726,650
Assoc. & Clubs .....	56,500	94,500	1,000	....	....	1,000 WP	153,000
Schools .....	46,500	15,800	2,300	....	....	....	64,600
State Forests .....	5,000	892,000	77,000	1,000	5,000	5,000 S L 500 V P	985,500
Other State Lands .....	269,000	392,400	3,500	100	500	9,000 Y P	674,500
Other Public Lands .....	53,500	11,000	4,000	500	....	....	69,000
Other Small Owners .....	1,925,225	1,906,900	163,900	35,300	21,500	3,500 Y P 15,000 S L	4,071,325
Forest Industries .....	6,435,000	6,626,500	31,000	5,250	1,000	22,500 Y P	13,121,250
Other Industries .....	1,669,000	1,171,000	2,000	....	....	20,000 Y P	2,862,000
Federal Lands .....	256,000	302,000	....	....	2,000	3,000 S L	563,000
Totals .....	*17,408,975	16,966,550	572,850	127,950	103,800	38,100 S L 71,100 Y P 1,000 WP 500 V P	35,290,825
Out-of-State .....			200		250		450
Unused NC Red Cedar .....					2,200		2,200
NC Slash Gain .....		79,550					79,550
GRAND TOTAL .....	17,408,975	17,046,100	573,050	127,950	106,250	110,700	35,373,025

\* Of the total loblolly planted, 650,000 seedlings were obtained from the State of Georgia.

We exchanged 250,000 slash seedlings with the State of North Carolina, for which we obtained 71,100 yellow poplar, 1,000 white pine, 15,100 shortleaf and 83,250 red cedar seedlings. This gave North Carolina a gain of 79,550 slash seedlings over the 170,450 seedlings we obtained.

Following are abbreviations used in the "Other Species" column:

Y P—Yellow Poplar

S L—Shortleaf

W P—White Pine

V P—Virginia Pine

TABLE 11—1954-55 SEEDLING DISTRIBUTION COUNTIES—SPECIES—AMOUNTS

County	Loblolly	Slash	Longleaf	Arizona Cypress	Red Cedar	Other Species	Totals
Abbeville .....	325,500	19,000	1,500	2,000	2,500	....	350,500
Aiken .....	173,000	1,849,200	91,100	14,200	7,500	....	2,135,000
Allendale .....	90,000	958,000	10,500	....	1,000	5,000 Y P	1,064,500
Anderson .....	539,000	.....	2,500	7,000	6,000	....	554,500
Bamberg .....	88,000	124,000	17,500	2,000	1,000	....	232,500
Barnwell .....	141,000	694,000	20,000	5,000	2,000	....	862,000
Beaufort .....	39,750	161,500	250	2,000	....	....	203,500
Berkeley .....	971,500	456,220	....	2,000	....	3,000 Y P	1,432,720
Calhoun .....	21,000	122,500	4,500	3,300	....	....	151,300
Charleston .....	157,000	417,000	1,000	1,050	....	20,000 Y P	596,050
Cherokee .....	143,000	.....	1,500	2,000	1,500	....	148,000
Chester .....	554,256	15,000	1,000	2,000	....	....	572,256
Chesterfield .....	241,000	692,400	50,500	2,000	6,000	....	991,990
Clarendon .....	27,500	370,700	4,000	....	....	....	402,200
Colleton .....	555,000	315,000	1,500	18,500	2,000	....	892,000
Darlington .....	144,000	43,500	20,500	....	1,000	....	209,000
Dillon .....	202,000	66,000	24,000	....	500	....	292,500
Dorchester .....	632,000	456,280	19,000	2,000	2,000	....	1,111,280
Edgefield .....	251,000	139,000	....	2,000	2,000	....	394,000
Fairfield .....	960,616	.....	....	....	1,000	....	961,616
Florence .....	100,700	59,500	5,500	1,000	....	....	166,700
Georgetown .....	463,500	939,500	....	1,000	....	....	1,404,000
Greenville .....	274,500	5,000	3,250	10,750	1,000	1,000 WP	295,500
Greenwood .....	870,250	14,000	....	....	4,000	6,200 Y P	894,450
Hampton .....	63,500	584,500	4,000	1,000	15,500	....	668,500
Horry .....	271,300	1,495,300	5,300	2,000	1,000	....	1,774,900
Jasper .....	131,000	1,537,000	7,000	5,000	....	....	1,680,000
Kershaw .....	468,200	2,593,000	51,000	2,200	500	20,000 Y P	3,134,900
Lancaster .....	911,100	41,000	....	....	1,000	....	953,100
Laurens .....	952,000	35,000	1,000	3,500	....	....	991,500
Lee .....	99,000	20,500	2,500	....	....	....	122,000
Lexington .....	350,500	386,500	40,000	6,500	7,000	....	790,500
McCormick .....	552,700	1,500	....	2,000	....	4,800 Y P	561,000
Marion .....	68,000	18,000	....	1,000	....	....	87,000
Marlboro .....	62,500	23,000	14,000	....	1,000	....	100,500
Newberry .....	460,526	.....	1,000	....	....	....	461,526
Oconee .....	411,300	.....	2,000	100	200	15,100 S L	431,300
Orangeburg .....	270,000	823,950	46,250	5,000	3,300	2,600 Y P	1,148,500
Pickens .....	1,093,950	2,000	500	3,100	3,000	15,000 S L	1,119,925
Richland .....	351,925	724,500	23,500	6,000	14,000	....	432,300
Saluda .....	216,400	6,000	5,000	....	....	....	710,450
Spartanburg .....	409,800	4,500	9,750	5,250	3,000	....	744,902
Sumter .....	80,800	552,700	64,650	1,500	5,300	5,000 S L	1,114,500
Union .....	735,902	.....	....	....	6,000	500 V P	591,100
Williamsburg .....	959,500	144,500	10,500	....	....	3,000 S L	....
York .....	524,000	55,800	5,300	4,000	2,000	....	....
Total Planted .....	17,408,975	16,966,550	572,850	127,950	*103,800	110,700	35,290,825
Less Ga. Stock .....	150,000	500,000	....	....	....	....	650,000
Plus N. C. Swap .....	....	250,000	....	....	....	....	250,000
Less N. C. Stock .....	....	....	....	....	83,250	87,200	170,450
Plus Out-of-State .....	....	....	200	....	250	....	450
Plus Unused Stock .....	....	....	....	....	2,200	....	2,200
S. C. Produced: .....	17,258,975	16,716,550	573,050	127,950	23,000	23,500	34,723,025
S. C. Production .....							34,723,025
Plus Ga. stock .....							500,000
Less Unused Stock .....							150,000
Less Unused Stock .....							2,200
Handled by Nursery: .....							35,370,825
Plus Unused Stock .....							2,200
GRAND TOTAL .....							35,373,025



TABLE 12—S. C. STATE COMMISSION OF FORESTRY  
DIVISION OF STATE PARKS  
SUMMARY OF STATE PARK USE, JULY 1, 1954-JUNE 30, 1955

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Fish- ermen	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathhouse Users	No. Out-of- State Cars	Total No. of Cars	Total No. of Visitors
Aiken .....	9	41	455	2,538	25,897	17,438	3,549	553	15,528	47,593
Andrew Jackson .....	....	....	....	46	1,009	....	....	558	2,550	7,996
Barnwell .....	....	....	1,641	1,588	45,000	18,979	5,570	871	21,706	80,694
Cheraw .....	646	3,189	10,535	6,788	77,369	89,346	25,126	16,510	48,668	216,712
Campbells Pond (N) .....	....	....	620	94	2,725	3,911	1,509	523	2,473	10,293
Chester .....	....	....	2,795	2,211	27,301	....	....	2,141	13,647	59,794
Croft .....	5	16	84	1,520	38,702	29,451	30,308	399	37,763	146,698
Edisto Beach .....	519	2,738	6,055	3,548	19,073	36,564	8,296	3,837	24,164	98,928
Givhans Ferry .....	28	168	....	627	27,129	8,324	851	587	11,386	42,186
Greenwood .....	....	....	5,725	3,151	66,195	23,889	3,599	....	39,520	152,595
Greenwood (N) .....	....	....	80	33	1,390	....	....	....	560	2,425
Hunting Island .....	109	630	14,368	7,895	37,202	50,956	12,641	13,867	67,209	165,627
Hunting Island (N) .....	9	50	2,829	2,755	15,435	11,917	5,040	2,751	9,104	37,847
Kings Mountain .....	....	....	561	1,629	53,735	17,425	8,037	21,668	33,394	142,229
Lee .....	11	35	805	812	19,720	14,553	6,915	435	15,242	60,850
Little Pee Dee .....	....	....	13	709	23,251	4,572	1,715	679	12,677	42,504
Myrtle Beach .....	713	3,870	15,736	9,186	42,364	30,042	11,031	6,767	22,083	78,265
Oconee .....	294	1,732	....	6,533	65,275	47,909	12,660	1,547	32,425	144,034
Paris Mountain .....	....	....	....	14,586	116,546	21,761	21,781	2,088	64,590	258,471
Pleasant Ridge (N) .....	7	37	....	751	7,978	269	360	429	4,467	19,758
Poinsett .....	254	1,440	587	5,602	86,515	36,188	21,554	4,647	40,570	187,138
Mill Creek (N) .....	....	....	308	519	8,721	11,651	11,651	107	4,297	21,850
Rivers Bridge .....	....	....	578	1,067	22,303	13,404	....	428	14,083	49,809
Santee .....	70	276	1,690	6,249	45,376	34,369	8,033	1,249	21,900	98,941
Sesqui-Cent. .....	....	....	1,130	27,070	297,311	318,295	19,365	37,208	154,331	643,985
Table Rock .....	1,028	5,725	1,090	5,076	37,367	61,947	13,619	4,146	38,310	219,781
Colleton Wayside .....	....	....	....	1,323	12,302	....	....	2,470	7,109	29,968
TOTALS .....	3,702	19,946	67,695	113,906	1,223,191	903,160	233,190	126,463	759,756	3,066,971

(N) Negro area





STATE OF SOUTH CAROLINA

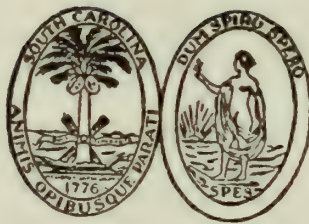
# REPORT

OF THE

# STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1955 TO JUNE 30, 1956



CHARLES H. FLORY, State Forester  
COLUMBIA, S. C.

Printed Under the Direction of the  
State Budget and Control Board

## TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL .....	5
PERSONNEL .....	6
SUMMARY .....	13
Recommendations .....	16
FOREST MANAGEMENT .....	19
Management Assistance .....	19
Reforestation .....	25
Cooperative Forest Management .....	28
State Forests .....	28
Cassatt State Forest .....	29
Harbison State Forest .....	30
Manchester State Forest .....	30
Sand Hills State Forest .....	33
Experimental Studies .....	36
FOREST FIRE PROTECTION .....	39
Forest Area Protected .....	40
Forest Fire Protection Organization .....	41
Fire Protection Activities .....	43
Improvements, Tools and Equipment .....	48
Equipment .....	52
Equipment Maintenance Shop .....	53
Forest Fire Summary .....	55
STATE PARKS .....	59
Appropriations .....	60
State Park Areas .....	60
Vacation Cabins .....	61
Group Camps .....	63
Historical Areas .....	64
Report on the Capitol Improvements Program .....	65
Recommendations .....	69
Summary of State Park Facilities .....	71
INFORMATION AND EDUCATION .....	73
Forest Fire Prevention .....	74
Cooperative Forest Fire Prevention Campaign .....	78
School Programs .....	78
Forestry Demonstrations .....	80
Georgetown Timber Festival .....	80
Conservation Week and Arbor Day .....	80
Fire Prevention Roadside Signs .....	81
Motion Pictures .....	82
Vocational Agriculture School Forestry Program .....	83
Resource-Use Education .....	84
Talks and Exhibits .....	85
Radio and Television .....	87
Training .....	88
News Releases and Articles .....	89
Boys' Forestry Camp .....	89
Publications .....	90
Sign and Woodworking Shop .....	91
South Carolina Tree Farms System .....	91
ADMINISTRATION .....	95
Personnel Accident and Injury .....	95
Automotive Accidents .....	95
Commission Purchasing .....	95
Personnel .....	96
Training .....	96
APPENDIX .....	97



*To Honorable George Bell Timmerman, Jr., Governor, and to  
the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Acts of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1954 to June 30, 1955.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
Fulton B. Creech, *Chairman.*

## PERSONNEL

### S. C. STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1956.)

#### *Members of the Commission*

Fulton B. Creech, Chairman, Sumter, S. C.  
 A. Leland Slade, Sr., Aiken, S. C.  
 Dr. R. F. Poole, President, Clemson College, Clemson, S. C.  
 A. B. Taylor, Spartanburg, S. C.  
 John C. Pracht, Greenwood, S. C.

#### *Secretary of the Commission*

Chas. H. Flory, State Forester

### DIVISION OF STATE PARKS

C. West Jacocks, State Park Director  
 T. D. Ravenel, Assistant State Park Director—Operations  
 E. R. Vreeland, Assistant State Park Director—Operations  
 VACANCY, Head, Plans and Designs

#### *State Park Superintendents*

Aiken State Park, Richard C. Condrey, Jr., Supt., Windsor, S. C.  
 Andrew Jackson Historical State Park, Cecil S. Hayes, Ranger, Rt. 1, Lancaster, S. C.  
 Barnwell State Park, Mrs. D. I. Ross, Supt., Blackville, S. C.  
 \*Cheraw State Park, George T. Holder, Supt., Cheraw, S. C.  
 Chester State Park, Clarence Doster, Supt., Chester, S. C.  
 Croft State Park, J. E. Thornton, Ranger, Spartanburg, S. C.  
 Edisto Beach State Park, Donald B. Cooler, Supt., Edisto Island, S. C.  
 Givhans Ferry State Park, Wm. Wiggins, Jr., Supt., Ridgeville, S. C.  
 \*Greenwood State Park, M. R. LeRoy, Supt., Ninety Six, S. C.  
 \*Hunting Island State Park, Robert G. Jones, Supt., Frogmore, S. C.  
 Kings Mountain State Park, Raymond M. Sisk., Supt., Kings Creek, S. C.



Lee State Park, Van W. Pressley, Supt., Bishopville, S. C.  
 Little Pee Dee State Park, LaFon Norton, Supt., Dillon,  
 S. C.

Myrtle Beach State Park, Thaddeus F. Barbie, Jr., Supt.,  
 Myrtle Beach, S. C.

Oconee State Park, James W. Ray, Supt., Walhalla, S. C.

Paris Mountain State Park, Ed. H. Miller, Supt., Green-  
 ville, S. C.

\*Pleasant Ridge State Park, LeRoy Smith, Ranger, Cleve-  
 land, S. C.

\*Poinsett State Park, F. Marion Dwight, Supt., Wedgefield,  
 S. C.

Rivers Bridge State Park, E. B. Mobley, Supt., Ehrhardt,  
 S. C.

Santee State Park, G. B. LaBoon, Supt., Santee, S. C.

Sesqui-Centennial State Park, Marshall D. Holder, Supt.,  
 Columbia, S. C.

Table Rock State Park, E. W. Cooler, Jr., Supt., Pickens,  
 S. C.

Colleton Wayside Park, Willard Risher, Caretaker, Ca-  
 nadys, S. C.

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\* Includes area for Negroes.

#### State Parks Advisory Committee

Mrs. Bradley Morrah, Sr.	Montgomery Bldg
212 Overbrook Road	Spartanburg, S. C.
Greenville, S. C.	Mr. Harry R. E. Hampton
Mrs. R. K. Wise	c/o The State
1709 Hollywood Drive	Stadium Road
Columbia, S. C.	Columbia, S. C.
Mrs. Jack Bryant	Mr. J. D. Carroll
Orangeburg, S. C.	Lexington, S. C.
Dr. V. F. Platt	Mr. Harold Petit
Conway, S. C.	Box 952
Mr. Wayne Freeman	Charleston, S. C.
c/o Greenville Piedmont	Mr. Cecil McDaniel
Greenville, S. C.	c/o Coca-Cola Bottling Co.
Hon. William C. Johnston	Beaufort, S. C.
Mayor	Mr. Bennett Moore
Anderson, S. C.	Cheraw, S. C.
Mr. Tom Moore Craig	

## **DIVISION OF FORESTRY**

### **Branch of Administration**

E. B. Price, Assistant State Forester

C. H. Nelson, Head, Fiscal and Accounting

Delford F. Furney, Head, Property and Supply

Virginia S. Holmes, Head, Personnel and Office Services

Warehouse, Sumter, S. C.

J. P. Watson, Warehouseman

### **Branch of Information and Education**

Walter T. Ahearn, Assistant State Forester

J. T. Hance, Information and Education Assistant

Nelson L. Peach, Information and Education Assistant

Sign and Woodworking Shop, Sumter, S. C.

Olin M. Ballentine, Foreman

### **Branch of Forest Management**

E. C. Pickens, Assistant State Forester

A. A. Lehocky, Management Assistant

Howard R. Scott, Management Assistant

Sand Hills State Forest, Patrick, S. C.

Randolph B. Lee, Director

Manchester State Forest, Wedgefield, S. C.

C. W. Nuite, Director

Horace L. Tilghman Nursery, Wedgefield, S. C.

L. M. Staley, Nurseryman

### **Branch of Forest Fire Control**

John R. Tiller, Assistant State Forester

W. J. Barton, Fire Control Assistant

John M. Shirer, Fire Control Assistant

John R. McLees, Fire Control Engineer

J. M. Geddings, Communications Engineer-Telephone

R. M. Littlejohn, Communications Engineer-Radio

Equipment and Repair Shop, Sumter, S. C.

O. P. Woodward, Supervising Mechanic



### District Offices

Chauncey R. Nichols, District Forester, Camden, S. C.

Legare M. Duke, Forester, Camden, S. C.

Maurice D. Stucker, Forester, Camden, S. C.

W. O. Morgan, District Ranger, Camden, S. C.

(Camden District includes counties of: Chesterfield, Kershaw, Lancaster, Lee, Richland and Sumter)

Alvin E. Kunz, District Forester, Florence, S. C.

John E. Graham, Forester, Conway, S. C.

Wilbur H. Reames, Forester, Florence, S. C.

Robert N. McCombs, Forester, Florence, S. C.

VACANCY, District Ranger,\* Florence, S. C.

(Florence District includes counties of: Darlington, Dillon, Florence, Horry, Marion and Marlboro)

Hugh M. Westbury, District Forester, Kingstree, S. C.

Fred W. Horn, Forester, Kingstree, S. C.

Marvin T. Gaffney, Forester, Kingstree, S. C.

John R. Grubbs, District Ranger, Kingstree, S. C.

(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown and Williamsburg)

E. L. Middleswart, District Forester, Newberry, S. C.

Harry Avedisian, Forester, Newberry, S. C.

Robert G. Reynolds, Forester, Greenwood, S. C.

Clifton T. Carter, Timber Marker, Chester, S. C.

Melton Wall, District Ranger, Newberry, S. C.

(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

Claude F. Barden, District Forester, Orangeburg, S. C.

Chas. C. Rountree, Jr., Forester, Orangeburg, S. C.

Robert P. Ford, Forester, Orangeburg, S. C.

John Hoover, Forester, Orangeburg, S. C.

Adrian Lee Pardue, District Ranger, Aiken, S. C.

(Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington and Orangeburg)

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\* District Ranger on leave of absence due to illness.

W. M. Lindsey, District Forester, Spartanburg, S. C.

Ralph W. Evans, Forester, Pickens, S. C.

J. Harlan McLees, Forester, Spartanburg, S. C.

Paul C. Bowie, District Ranger, Spartanburg, S. C.

(Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

Boris Hurlbutt, District Forester, Walterboro, S. C.

Paul B. Carson, Forester, Walterboro, S. C.

Warren L. Brown, Forester, Walterboro, S. C.

E. H. Benton, District Ranger, Walterboro, S. C.

(Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton and Jasper)

### Protection Units

Abbeville Unit Ranger, Charlie Shaw, Lowndesville, S. C.

Aiken Unit Ranger, J. Ramie Yonce, Aiken, S. C.

Allendale Unit Ranger, W. W. Brunson, Allendale, S. C.

Anderson Unit Ranger, John E. Embler, Anderson, S. C.

Bamberg Unit Ranger, P. H. Cave, Olar, S. C.

Barnwell Unit Ranger, W. R. Moore, Barnwell, S. C.

Beaufort Unit Ranger, R. W. Wisner, Beaufort, S. C.

Berkeley Unit Ranger, Harold McCoy, Bonneau, S. C.

Calhoun Unit Ranger, Hampie F. Ott, St. Matthews, S. C.

Charleston Unit Ranger, K. W. Leland, Charleston, S. C.

Cherokee Unit Ranger, B. T. White, Gaffney, S. C.

Chester Unit Ranger, J. Gill Simpson, Chester, S. C.

Chesterfield Unit Ranger, W. M. Smith, Chesterfield, S. C.

Clarendon Unit Ranger, Elliott E. Rose, Manning, S. C.

Colleton Unit Ranger, Glenn B. Britt, Walterboro, S. C.

Darlington Unit Ranger, Alton Yarborough, Darlington, S. C.

Dillon Unit Ranger, Ernest S. Oliver, Dillon, S. C.

Dorchester Unit Ranger, Carlisle Haskell Durr, St. George, S. C.

Edgefield Unit Ranger, S. G. Reel, Edgefield, S. C.

Fairfield Unit Ranger, R. E. Patrick, Winnsboro, S. C.

Florence Unit Ranger, Hugh Cusaac, Florence, S. C.

Georgetown Unit Ranger, Laurin T. Sessions, Georgetown, S. C.

Greenville Unit Ranger, G. G. Paris, Greenville, S. C.



Greenwood Unit Ranger, James C. Smith, Jr., Greenwood, S. C.  
 Hampton Unit Ranger, J. D. Peeples, Early Branch, S. C.  
 Horry Unit Ranger, W. E. Watts, Conway, S. C.  
 Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland, S. C.  
 Kershaw Unit Ranger, L. E. Smith, Camden, S. C.  
 Lancaster Unit Ranger, A. A. Plyler, Lancaster, S. C.  
 Laurens Unit Ranger, H. E. Martin, Laurens, S. C.  
 Lee Unit Ranger, E. A. Hall, Bishopville, S. C.  
 Lexington Unit Ranger, V. S. Bickley, Lexington, S. C.  
 Marion Unit Ranger, Hoyt Collins, Marion, S. C.  
 Marlboro Unit Ranger, B. T. Clark, Bennettsville, S. C.  
 McCormick Unit Ranger, G. L. Sharpton, McCormick, S. C.  
 Newberry Unit Ranger, Marvin E. Wilson, Newberry, S. C.  
 Oconee Unit Ranger, D. O. Morgan, Walhalla, S. C.  
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg, S. C.  
 Pickens Unit Ranger, C. H. Gravely, Pickens, S. C.  
 Richland Unit Ranger, T. W. Cooper, Columbia, S. C.  
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda, S. C.  
 Spartanburg Unit Ranger, Charles E. Turpin, Spartanburg,  
 S. C.  
 Sumter Unit Ranger, L. G. Cubbage, Sumter, S. C.  
 Union Unit Ranger, James G. Long, Union, S. C.  
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree, S. C.  
 York Unit Ranger, E. G. Foster, York, S. C.

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 Mr. M. H. Whetsell, Southern Nat'l Bank, Orangeburg, S. C.  
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 Mr. George H. Priester, Neeses, S. C.

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 Mr. J. H. Bolding, Rt. 2, Pickens, S. C.  
 Mr. T. J. Mitchell, Pickens, S. C.  
 Mr. T. A. Bowen, Pickens, S. C.  
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 Mr. E. B. Wingard, Rt. 2, Columbia, S. C.  
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**Sumter—**

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 Mr. Curtis Edens, Dalzell, S. C.  
 Mr. W. R. Keels, Pinewood, S. C.  
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Mr. R. S. Flanagan, Bowling Green, S. C.  
Mr. John M. Foster, York, S. C.





The work of the S. C. State Commission of Forestry involves both people and trees. The main activities of the Commission are: assisting private woodland owners in protecting their forest lands from fire; in developing and managing their woodlands and in harvesting and marketing their forest products; and establishing, developing, and operating a system of state parks.



## SUMMARY

### Forest Fire Protection:

The fiscal year 1955-56 resumed the normal fire occurrence pattern which has been common to South Carolina. The vast majority of the forest fires and acreage burned occurred during the winter and spring months as contrasted to high summer occurrence during the past few years. Relatively low fire occurrence was experienced throughout the summer. Fifty per cent of the total number of fires occurred during the months of January and March. Eighty per cent of the total acreage burned was experienced during the months of January, March, and April.

The total rainfall for South Carolina during the fiscal year was 43.16 inches or 4.01 inches below normal. This figure represents an increase of 5.47 inches over the previous fiscal year. The month of December, with an average precipitation of 0.83 inch, was deficient by 2.72 inches and became the second driest December since 1887. The following month of January experienced a deficiency of 1.66 inches below normal rainfall and became the twelfth driest January since 1887. This month was also the coldest January since 1948 and one of the coldest since 1887. This critically dry period, linked with the usual brisk winds experienced this time of year, caused extreme difficulties in placing the numerous forest fires under control.

During the fiscal year 1955-56, a total of 4,506 fires burned 76,743.5 acres. The area burned represents 0.96% of the total forest area under protection. The average area burned per fire was 17.0 acres.

Comparing the above summary with the record for fiscal year 1954-55, a total of 7,022 fires burned 158,785.5 acres or 1.41% of the total forest area under protection. The average area burned per fire during 1954-55 was 22.6 acres.

Much progress has been made in recent years in ways and means of combatting wild forest fires. More mechanical fire fighting equipment and better communications have been made available resulting in greater efficiency in bringing going fires under control. With increased protection efforts, denser stands of bigger trees can be expected which will require greater skill

and different equipment to accomplish and maintain adequate protection. Accordingly, each year the job of controlling fires becomes more difficult and more expensive to perform.

In keeping with more adequate fire protection which is vitally needed, a number of recommendations are made at the end of this Summary section.

### **Forest Management:**

Again the major emphasis of the Commission of Forestry's program was directed toward assisting small, private woodland owners with their forest management problems. The larger industrial ownerships control approximately 20%, all types of public ownerships control 7%, and the small woodland ownerships control the remaining 73% of the woodland area. The Timber Resources Review Report, for which the field work was completed in 1953, was published in 1955. This report indicated that most of the State-Federal ownerships, industry, and large ownerships, are being handled as they should be for maximum forest production. The Timber Resources Review Report indicated, too, that the greatest problem still remains with the small woodland ownerships who control 73% of the woodland area.

During the year the Commission's foresters made woodland examinations on 1,322 separate woodland areas, covering approximately 191,143 acres. A total of 16,246,795 board feet of sawtimber was marked and 9,167 cords of pulpwood were marked. Commission foresters assisted many more landowners in getting a private or industrial forester to selectively mark sawtimber or pulpwood.

The average prices received for selectively marked sawtimber and pulpwood by landowners continues to be considerably above that for sawtimber or pulpwood sold on a boundary or diameter limit basis. This is particularly true where no estimate of the amount to be sold is made when boundary or diameter limit sales are used.

A timber sales study was made by the Southeastern Forest Experiment Station personnel in cooperation with the Forestry Commission and a bulletin published, which shows price trend information for the past five years. This study definitely proved



that an estimate of the timber prior to the sale increased returns to the landowner very substantially.

The Commission's Horace L. Tilghman Nursery at Wedgefield, S. C., produced 33,024,150 seedlings for South Carolina landowners in 1955-56. This was the third highest production on record for the Commission of Forestry. In addition, orders for 14 million trees, in excess of the amount produced, were received.

A second tree nursery was authorized by the State Legislature. This nursery will be in operation by the spring of 1957 and trees should be available for shipping from this nursery by the fall of 1957. The goal for 1957-58 tree seedling production is 60 million seedlings. With approximately 11½ million acres that should be planted in the state, it would still require some 25 years to complete the planting job if 60 million trees per year are planted. Present indications are that a record production will be obtained from the Wedgefield nursery this coming season. This will meet only about one-half of the total demand, however.

The State Commission of Forestry continued to operate four state forests. The combined area of these state forests represents about 1% of the total forest area in the state. Experimental and demonstration plantings and other management experiments were continued on these forests. One of the major activities continued to be the reconversion of woodland scrub oak lands back to production of pine. More than 500 acres were cleared during 1955-56 and have either already been planted to pine, or will be planted this coming winter. One of the major activities on the forest continues to be that of building up the desirable timber stocking on badly cut-over understocked areas.

Two large sawmill companies ceased operating during the year, partially due to the increased minimum wage law. These companies continued to manage their woodlands on a sustained yield basis; however, instead of logging, sawing, and processing their own lumber, they are now selling stumpage or logs to the smaller portable or stationary mills in the area. Two new pulpwood industries announced that they would begin building a plant in South Carolina and would be operating within a few years. The expansion of these pulp industries should bring

about an expanded market for timber of all sizes and kinds, particularly lower quality timber.

### **State Parks:**

The importance of the service rendered South Carolina by its system of 22 state parks can be visualized by the fact that again in the fiscal year over three million visitors used them for health, relaxation, and recreation. Attendance has increased six-fold in the past decade, and totals indicate that approximately three million visitors enjoy the state parks each year.

Additional facilities have been added to all the parks as a result of the \$300,000 bond issue, and park visitors were greeted with more improvements than in any period since the parks began operating twenty years ago.

The need for adequate maintenance of these increased facilities is evident in the light of the conservation of human resources. Mental health and stability of families are direct results of wholesome outdoor recreation in the naturalistic setting of South Carolina's State Parks. With increased leisure on the one hand, and the tension of our times on the other, State Park values cannot be reckoned in dollars and cents.

### **Information and Education:**

The information and education approach to forestry and state park problems and opportunities in South Carolina is the sum total of many people and many activities. It is a ranger or a warden talking to a landowner, to a class of school children, or to a volunteer offering help on a going woods fire. It is a district forester meeting with local citizens about the woods fire problem in a community, or conducting a tree planting demonstration for those ordering trees for the first time. It is a forester conducting a timber thinning demonstration in the woods with a class of vocational agriculture students, or presenting a program on conservation at a garden club or civic club meeting. It is a towerman talking to a visitor, explaining the fundamentals of forest fire prevention and forest fire control activities. It is a state park superintendent operating an area of a thousand acres or more and serving as host to ten thousand people on a hot summer day, or helping a school teacher unfold the mysteries of a nature trail to a group of children. It is a landowner understanding that one tree should be cut because it is overmature, while its neighbor should be left because it is



growing wood at the rate of six to sixteen percent return on his investment. It is any South Carolinian realizing that even a little fire kills little trees, regardless of why or how the fire started.

Yes, forestry and state park information and activities involve many things and many people. Press releases, photographs, pamphlets, talks, field demonstrations, films, radio and television are some of the tools used in carrying out the mandate given the Commission to inform the people of South Carolina on forestry and state park matters.

South Carolinians who are made aware of the seriousness of the problems that face our state in the fields of state parks and the conservation of our natural resources will realize that by taking positive action, these problems can be turned into opportunities.

As South Carolinians, as individuals, realize that each of us has some stake and responsibility in the present and future of our forests and state parks, we find that there are things every one of us can do to turn these problems into opportunities for us, our families, our children, our community, and our State.

#### **Administration:**

With no increase in state appropriated funds for "Operations" the Commission of Forestry could not increase individual salaries or given merit increases, which resulted in a continuing loss of both technical and other personnel. A total of 64 employees resigned during the year, of which 58% were county personnel.

The Commission budgeted and spent on all phases of the Forestry and Park Program \$1,960,373.52, and of this total the Division of Forestry expended \$1,503,177.47 and the Division of State Parks \$457,196.32. (See financial sheet for detailed explanation of funds available and expenditures made.) State appropriated funds amounted to \$1,136,626.77 for the Division of Forestry and \$336,611.00 for the Division of State Parks.

#### **Recommendations:**

1. Salary increases to all existing personnel, with adjustments to bring certain positions into line with duties and responsibilities.

2. Intensification of the forest fire prevention education program to reduce fire occurrence.

3. Employment of three Law Enforcement Officers to intensify this phase of the program.

4. Secure full support and cooperation of magistrates, judges, and solicitors in connection with prosecution of violations of the State Fire Laws.

5. Strengthen forest fire laws by:

a. Amending Section 16-318 of the 1952 Code by increasing the penalties.

b. Passage of an Act to provide that responsible persons be liable for the expense incurred by the State in suppressing fires which start on or spread to lands of another.

c. Passage of an Act to provide penalties for starting fires by disposing of inflammable materials.

d. Passage of a statewide Notification of Intent to Burn Law.

6. Provide additional medium and heavy fire suppression units to increase efficiency of suppression and to minimize damage and loss from forest fires.

7. Increased use of airplane patrol on days of high fire occurrence and low visibility.

8. Employment of all equipment operators on a full-time basis.

9. More adequate funds for:

a. Normal replacement of trucks, tractors, plows, and other tools and equipment.

b. Maintenance of all improvements, facilities, tools, and equipment.

c. Construction of adequate maintenance facilities for fire control equipment.

10. Replacement of the remaining six wooden towers with steel towers.

11. Construction of dwellings at all dispatching towers which do not presently have houses.

12. Begin installation of sanitary facilities at all lookout tower residences.

13. Conduct such forest fire protection research as is necessary to more adequate and efficient prediction, detection, suppression, and control of forest fires.

14. Study the advantages and disadvantages of a rainfall stimulation and long-range weather forecasting program.

15. Provide for soil improvement work at the Wedgefield nursery, construction and operation of a new nursery in the



Piedmont, and an expanded program of pine seed procurement to meet increasing demands for seedlings.

16. A stepped-up program to improve state-owned forest lands to bring these areas into full production.

17. Provide by law for detection and control of forest insects and diseases.

18. Adequate funds for operation of 22 state parks to keep pace with the greatly increased public use, and to provide for adequate maintenance of buildings, installations, and equipment.

19. The areas comprising the State Park system are generally adequate to serve the people of South Carolina with the following exceptions:

a. Two additional state parks for use by Negroes are needed—one in the Charleston area and another in the vicinity of Columbia.

b. Next in order for a state park for whites should be the area centering around Williamsburg County.

c. A state park near Anderson on the Hartwell Dam project.

d. Development of the two acquired areas on the Clarks Hill Reservoir, Baker Creek for whites and Hickory Knob State Park for Negroes, should follow in a fourth priority position.

20. That the Legislature continue to defend the integrity of the state park system against all encroachments, including threats from organizations or individuals tending to break down the segregated use of parks. To preserve for this and future generations this extraordinary natural resource valued at more than \$6,000,000. To keep intact the 22 state recreation areas, embracing 46,000 acres of natural woodlands and waters, for if once abandoned, this resource could never be recovered.

21. Intensify the Commission's over-all educational program to: develop a public awareness of the need for forest conservation; prevent forest fires from occurring; encourage intelligent timber harvesting to yield a greater production per acre per year; and encourage the planting of idle land to trees. Such a program of informing the people of the state would also help guard against insect and disease attack. It would acquaint landowners with ways to eliminate weed species of trees to permit better yields of higher valued products. It would teach a more intelligent use of state park facilities to the end that people would better enjoy, appreciate, develop, conserve and wisely use the natural beauty and resources of South Carolina.





Swimming, picnicking, and many other facilities offered, attracted nearly three million visitors to South Carolina's State Parks during the year.



## STATE PARKS

The fiscal year 1955-56 may be distinguished as the time when visitors to the state parks were greeted with the greatest improvements in facility expansions that have occurred since the South Carolina system of parks was established twenty years ago, and as the time when action was brought in federal court attempting to open to Negro use a state park established for white citizens.

A bond issue of \$300,000 and other funds of nearly \$100,000 made approximately \$400,000 available for capital improvements. New vacation cabins were built in white and in Negro areas; so were bathhouses and picnic shelters; a community recreational building was added and a coastal fishing pier was rebuilt; and in all parks road systems were improved and parking areas expanded.

The court action tending to break down the racially-segregated use of Edisto Beach State Park resulted in the closing of the park by the state legislature in February, 1956. A subsequent ruling by the Court dismissed the action, holding there was no controversy as the park had been closed to all use. The park can be reopened only by action of the legislature. The legislature also wrote into the provisions of the new operating budget the notation: "Division of State Parks—for racially segregated parks only."

Attendance at active state parks continued to be heavy. Once again approximately three million visitors sought outdoor recreation in these twenty-two areas. Picnicking facilities were still in greatest demand, with nearly a million individuals joining family groups, churches, and other organizations for a meal in the out-of-doors. Swimming areas had the best safety record ever recorded.

Bathing before swimming, food particles and litter kept away from the beach, and tighter supervision over swimmers has resulted in a more wholesome operation. Many of the family vacation cabins and group camps are generally booked long before the season opens, and by summer's end every vacation week had been filled. The greatest increase of any particular use was in the tent and trailer camp areas. There is a tremendous upsurge



A fawn joins a picnic party at one of South Carolina's State Parks. Many park users combine picnicking, swimming and nature study in their visits to the State Parks.

nationally in the number of individuals and families on the move. People are visiting every section of the country. They are camping out and have learned to seek the national and state parks as safe and clean places to camp for a night or for a vacation period. Additional facilities will have to be provided in all parks to meet this increasing request for camping space.

### APPROPRIATIONS

The total appropriation for the Division of State Parks for operations amounted to \$336,611. This was approximately the same as for the previous year, but was \$23,000 less than the budget request. The biggest reduction was in the items for maintenance and upkeep. The saving in the operational cost for Edisto Beach State Park, which is now in "stand-by" maintenance, was more than offset by the increase in number of facilities and installations. An average annual budget of approximately \$360,000 is required for adequate operation and maintenance. This amounts to approximately 12 cents per park visitor—the national average is 19 cents.





Tent and trailer camping showed a greater increase than any other park use during the year.

### STATE PARK AREAS

The first acreage acquired for development into a state park came in 1934, and the first areas completed and ready to receive visitors came two years later. On July 1, 1936, Myrtle Beach State Park received the first official state park visitor in South Carolina; in August Poinsett and Aiken also started playing host to park users.

From one park, Cheraw, in 1934, the system now embraces 22 areas. Twenty parks are for the use of white families and five areas are developed with comparable facilities for the exclusive use of Negro citizens.

The 22 state parks, with their acreages, location, date of establishment or acquisition, and date opened to visitors, are shown below:

Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	1,067	Aiken .....	July 1934	Aug. 1936
Andrew Jackson Historical..	360	Lancaster .....	April 1953	Under Construction
Barnwell .....	300	Barnwell .....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield .....	March 1934	July 1939
Chester .....	523	Chester .....	May 1935	July 1939
Croft .....	7,135	Spartanburg .....	May 1949	June 1949
Edisto .....	1,255	Charleston .....	Feb. 1935	June 1937
Givhans Ferry .....	1,235			Closed Feb. 1956
Greenwood .....	914	Dorchester-Colleton .....	Oct. 1934	June 1937
Hunting Island .....	5,000	Greenwood .....	April 1938	July 1940
Kings Mountain .....	6,141	Beaufort .....	July 1938	June 1941
Lee .....	2,839	York-Cherokee .....	Nov. 1934	June 1940
Little Pee Dee .....	835	Lee .....	June 1935	June 1941
Myrtle Beach .....	312	Dillon .....	June 1951	June 1955
Oconee .....	1,165	Horry .....	Aug. 1934	July 1936
Paris Mountain .....	1,275	Oconee .....	July 1935	June 1937
Pleasant Ridge .....	300	Greenville .....	April 1935	June 1937
Poinsett .....	1,000	Greenville .....	Sept. 1950	June 1955
Rivers Bridge .....	390	Sumter .....	Aug. 1934	Aug. 1936
Santee .....	2,364	Bamberg .....	May 1945	July 1945
Sesqui-Centennial .....	1,500	Orangeburg .....	Jan. 1942	June 1949
Table Rock .....	2,860	Richland .....	Aug. 1937	June 1940
		Pickens .....	May 1935	June 1940
	46,131			

The Commission of Forestry also administers one wayside park and six historical areas:

Colleton Wayside, Colleton County

Eutaw Springs, Orangeburg County

Ft. Watson, Clarendon County

Thomas Sumter Burial Site, Sumter County

Burial places of:

Gen. Francis Marion, Berkeley County

Col. Isaac Hayne, Colleton County

Thomas Heyward, Jasper County

### FAMILY VACATION CABINS

The state park cabins have for years provided means for families with limited recreational budgets to enjoy vacations in the mountains or seashore or on inland lakes and forests at small expense. The 61 cabins at eight state parks accommodate nearly a thousand white families during the year. There is very little use of the cabins for Negro families at Pleasant Ridge in the mountains of Greenville County or at Hunting Island on the coast.

The newly constructed cabins, two at Santee and three at Hunting Island, failed to meet the demand for these facilities or to offset the loss of use of five cottages at Edisto Beach State Park.

Below are listed parks having vacation cabins, their number, together with rates for weekly and weekend rentals:



Park	County	Cabins	Weekly	Week-End
Cheraw	Chesterfield .....	9	\$24-36	\$9-15
Edisto Beach	Charleston .....	5	Closed	
Givhans Ferry	Dorchester .....	5	24	9
Hunting Island	Beaufort .....	4	36-45	15-20
Myrtle Beach	Horry .....	5	36	15
Oconee	Oconee .....	20	20-36	8-15
Poinsett	Sumter .....	6	24-42	9-15
Santee	Orangeburg .....	2	28	12
Table Rock	Pickens .....	12	24-44	10-15

### Facilities for Negro Families

Hunting Island	Beaufort .....	2	35	12.50
Pleasant Ridge	Greenville .....	2	35	12.50



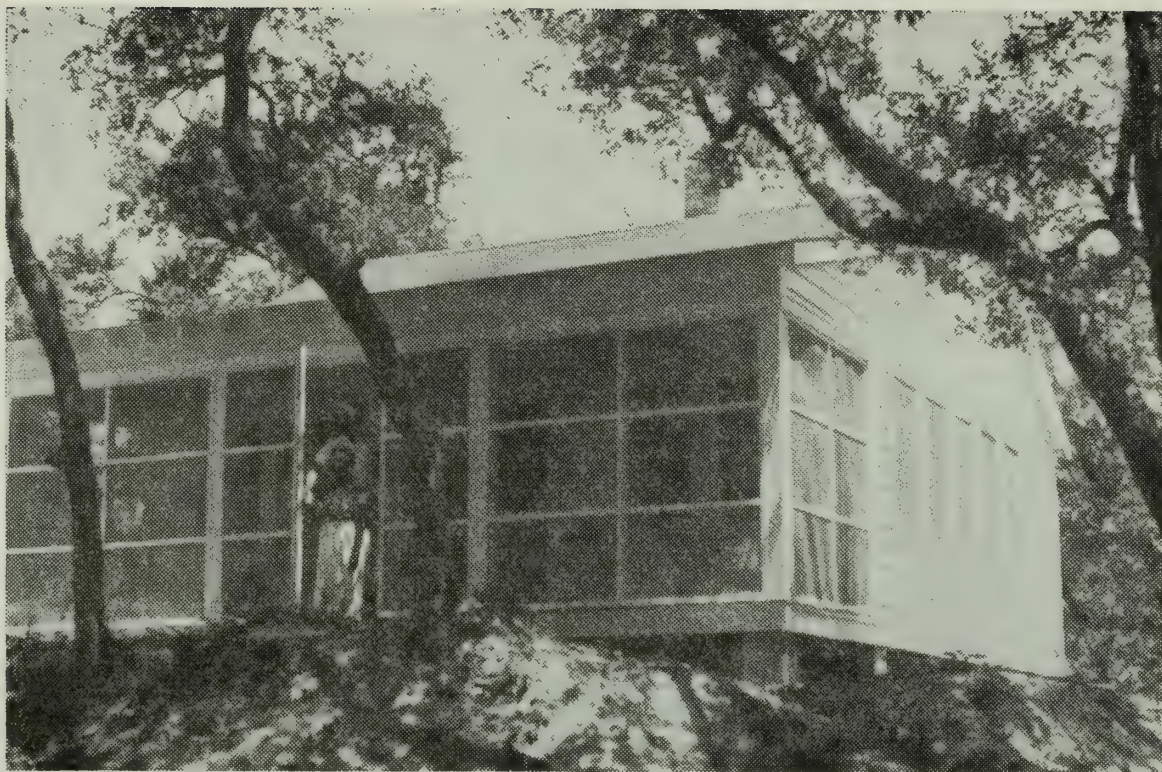
One of the five cabins for white families at Myrtle Beach State Park. Family cabins for white families are also located at Cheraw, Givhans Ferry, Hunting Island, Oconee, Poinsett, Table Rock and Santee State Parks.

All cabins have electric lights, electric stoves, and electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin-user must bring blankets, bed linens and towels, and silverware, such as knives, forks and spoons, as these are not included.

During the period June 1st through Labor Day *summer rates* are effective and cabins are rented for a period of one week only. This is necessary because the demand for cabins for weekly vacations already exceeds the number of cabins available.

To give every family an equal opportunity to obtain a cabin, assignments are made as a result of a public drawing. All South





One of the cabins for Negro families at Hunting Island State Park on the seashore. Family cabins for Negroes are also located at Pleasant Ridge State Park in the mountains of Greenville County.

Carolina applications are considered first; then out-of-state requests are reviewed.

Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, Box 357, Columbia, S. C., and must be received in Columbia prior to March 1st.

### **Group Camps**

Seven group camps—six for white and one for Negro campers—located at four state parks, Paris Mountain, Cheraw, Kings Mountain and Poinsett, continue to supply the facilities for several thousand children seeking out-of-doors adventure. With a daily capacity of 550 campers and about 13 weeks in the summer season, some 38,000 camper days are counted at the seven areas. Church and school groups, Boy and Girl Scouts, YMCA and YWCA's make up the greater portion of the use agencies.

### **Historical Areas**

The Division of State Parks is charged by the Legislature to maintain six historical areas within the State and receives a special appropriation for this purpose.



The Fort Watson Memorial, an Indian Mound in Clarendon County; the General Thomas Sumter burial area in Sumter County; and the Eutaw Springs Historical Site in Orangeburg County, were deeded to the Commission of Forestry and a definite program of maintenance is in operation.

The burial places of General Francis Marion at old Bell Isle Plantation in Berkeley County, of Col. Isaac Hayne in Colleton County, and of Thomas Heyward in Jasper County are in private ownership and receive clean-up attention from the Commission.



Many organized groups which do not have their own camp facilities use the State Park Group Camps. This enables many youngsters to enjoy a camping experience each year.

## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps	Museum	Trailer & Tent Camping †
Aiken Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x			
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x	
BARNWELL Blackville, S. C. ....	x	x	x	x	x	x	x				x		x		x			x
CHERAW Cheraw, S. C. .... { White Area. Negro Area.	x x	x x	x x	x x	x x	x x	x x	x x			x x		x x	x x	x x	x x		x x
CHESTER Chester, S. C. ....	x	x				x	x				x				x			
CROFT Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x			
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																		
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x			
GREENWOOD Ninety Six, S. C., RFD. { White Area. Negro Area.	x x	x x	x x	x x	x x	x x	x x	x x					x x		x x			
HUNTING ISLAND Frogmore, S. C. .... { White Area. Negro Area.	x x	x x		x x	x x		x x	x x			x x		x x		x x			x x
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x		x
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x			
LITTLE PEE DEE Dillon, S. C. ....	x	x	x	x	x	x	x											
MYRTLE BEACH Myrtle Beach, S. C. ....	x	x		x	x		x	x		x	x		x		x			x
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x	x	x			x
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x		
PLEASANT RIDGE (For Negroes) Cleveland, S. C. ....	x	x		x	x	x	x	x					x					
POINSETT Wedgfield, S. C. .... { White Area. Negro Area.	x x	x x	x x	x x	x x	x x	x x	x x				x x	x x		x x	x x		x x
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x		x	
SANTEE Elloree, S. C., RFD.....	x	x		x	x	x	x	x					x		x			
SESQUI-CENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x			
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x			x

- Where no regular Barbecue Pit and shelter are established, temporary arrangements can be made at all Parks.

† Where no developed camping areas are established, temporary arrangements can be made at all parks.



S. C. STATE COMMISSION OF FORESTRY—DIVISION OF STATE PARKS  
SUMMARY OF STATE PARK USE, JULY 1, 1955—JUNE 30, 1956

PARKS	No. Cabin Days Occupied	No. Cabin Occupants	No. Fish- ermen	No. Picnic Parties	No. of Picnickers	No. of Swimmers	No. Bathhouse Users	No. Out-of- State Cars	Total No. of Cars	Total No. of Visitors
Aiken .....	43	172	536	3,773	35,132	10,590	6,678	1,950	16,065	56,160
Andrew Jackson .....	...	...	...	233	3,629	...	...	851	4,471	12,984
Barnwell .....	...	...	913	1,895	41,675	11,430	613	704	15,437	75,761
Cheraw .....	356	4,013	9,056	6,580	69,788	76,637	39,450	13,912	43,905	214,350
Campbells Pond (n) .....	...	...	675	535	4,635	3,686	1,956	1,071	2,851	13,080
Chester .....	...	...	969	1,495	17,682	...	...	2,060	12,930	54,578
Croft .....	...	...	...	1,215	24,615	35,879	35,879	294	21,811	95,530
Edisto Beach .....	353	1,851	2,760	2,008	10,299	16,759	6,709	1,116	9,284	40,094
Givhans Ferry .....	60	330	8	949	38,350	12,812	2,828	1,051	14,714	62,675
Greenwood .....	...	...	8,995	3,518	64,672	12,100	11,600	430	37,950	147,600
Greenwood (n) .....	...	...	356	161	2,713	...	...	50	1,364	5,849
Hunting Island .....	686	4,031	18,693	13,703	58,862	60,693	18,142	10,478	47,842	193,584
Hunting Island (n) .....	53	205	3,159	3,815	24,968	14,871	6,425	3,574	10,804	65,334
Kings Mountain .....	...	...	861	1,053	46,067	15,773	15,773	19,275	32,525	143,035
Lee .....	18	75	1,314	795	17,767	12,071	11,780	364	11,525	49,940
Little Pee Dee .....	...	...	499	830	31,312	5,440	4,659	1,019	15,036	52,850
Myrtle Beach .....	736	4,277	28,666	6,456	29,722	21,600	4,258	13,602	42,074	173,787
Oconee .....	1,746	8,730	1,103	4,788	54,519	35,974	21,161	1,489	26,052	136,513
Paris Mountain .....	...	...	...	13,343	117,400	28,835	26,060	2,260	67,131	290,698
Pleasant Ridge (n) .....	30	161	...	977	13,791	1,186	1,186	460	5,902	28,022
Poinsett .....	255	1,481	946	5,413	56,774	22,345	22,345	3,482	31,765	145,465
Mill Creek (n) .....	...	...	129	259	4,832	5,938	5,938	70	2,589	16,722
Rivers Bridge .....	...	...	1,098	1,150	19,544	11,951	11,951	425	12,827	44,420
Santee .....	145	812	2,123	2,293	34,967	14,810	14,752	930	18,249	86,797
Sesqui-Centennial .....	...	...	1,083	23,145	202,973	58,868	58,868	22,716	104,918	484,387
Table Rock .....	1,095	6,159	922	5,601	41,425	36,573	30,440	799	39,425	172,070
Colleton Wayside .....	...	...	...	1,734	14,697	...	...	3,175	7,653	31,706
(n) Negro Area .....	5,276	32,237	85,764	107,517	1,082,810	526,821	359,651	107,607	657,099	2,893,996





Fire—the "creeping killer" snuffed out the life of millions of little trees on 108,264 acres of forest land illegally burned during 1955-56 in South Carolina. This loss seriously affects the future prosperity of the people of the Palmetto State.



# FOREST FIRE PROTECTION

## FOREST AREA PROTECTED

All forest fire protection work on state and privately owned lands in South Carolina is under the direction and supervision of the State Commission of Forestry. The total area of these lands comprise 11,300,008 acres of which approximately 169,574 acres are state-owned parks and forests. Intensive forest fire protection is furnished to all forest landowners on a cooperative basis whereby the private landowners cooperate with the State Commission of Forestry in the prevention and control of fires on their timberlands. The U. S. Forest Service protects a total of 587,361 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres. These federal lands are not included in the state statistics mentioned above.

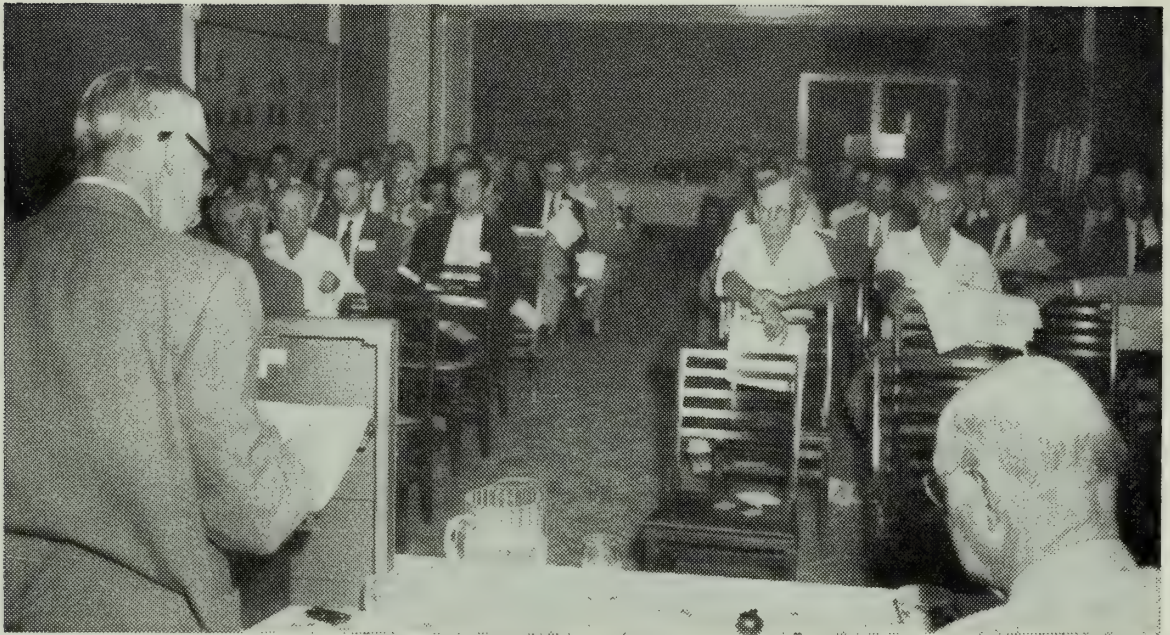
## FOREST FIRE PROTECTION ORGANIZATION

The Forest Fire Control Organization of the South Carolina State Commission of Forestry is designed to cooperate at all times with individual landowners in the protection and control of wild fires on their timberlands. Even though the Commission renders protection service whenever and wherever possible, the landowner is not relieved of the responsibility for fires on his property. The administration of all forest fire protection activities is supervised by the central Fire Control Branch in Columbia. The State is sub-divided into seven (7) forest service districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district.

### County Forestry Boards:

In each county, there is a county forestry board consisting of five members who are appointed by the State Commission of Forestry on recommendation of the majority of the county legislative delegation in the House of Representatives and the Senator. All members are residents of the county from which they are appointed. The members are appointed for a five-year term, each member holding office until his successor is appointed.





**The State Advisory Committee of County Forestry Boards makes valuable contributions in planning the Commission's fire control program and other forestry activities.**

The county forestry boards assist in the effective performance of the requirements of the Forest Fire Protection Act and the general conduct of the forestry program within the county. They review and adopt the forest fire protection plan and the annual district report. They also employ and retain all members of the county forest fire protection organization. An annual meeting is held in July of each year at which time a review and discussion of all forest fire protection activities, including the financial statement for the previous and forthcoming fiscal years, is conducted. The individual forestry board members are recognized forestry leaders within their respective counties and have assisted materially in the effective coordination of all fire protection activities within the State. The forestry board members serve without pay and willingly assist the State Commission of Forestry in carrying out its forestry program.

#### **State Advisory Committee of County Forestry Boards:**

The membership of the State Advisory Committee of County Forestry Boards is composed of one delegate from each county board elected by the membership of the board or appointed by the board chairman. The purpose of the state committee is to serve in an advisory capacity to the State Commission of Forestry in all phases of forestry, including forest fire control,



forest management, reforestation, and information and education. An annual meeting is held each year at which time the delegates discuss the proposed action programs of the S. C. State Commission of Forestry for the forthcoming fiscal year and also consider the budget request which will be submitted to the State Legislature. The Committee is designed to study in detail all activities of the Commission of Forestry and to make recommendations concerned with improving the overall efficiency of all phases of the work.

### **County Units:**

All forest fire protection activities within each county are supervised by the individual county unit rangers. In addition to the rangers, the county organization is made up of wardens, tractor operators, and towermen, all of which assist in the coordination of efforts formulated to protect state and private-owned lands from wild fires. Unit personnel employed throughout the state consist of 46 rangers, 133 wardens, 50 tractor operators, and 137 towermen. Some 18,610 volunteer personnel rendered assistance to the full-time county employees in the suppression of illegal forest fires during the last fiscal year.

### **State Forests and Parks:**

All of the State Parks and Forests are furnished with a detailed fire protection plan similar to the plans used by county fire control personnel. The Branch of Fire Control cooperates very closely with the individual State Forest Directors and State Park Superintendents in the prevention and suppression of woods fires on these state-owned lands. All activities on the State Forests and the State Parks are supervised directly by the forest directors and park superintendents.

### **Cooperative Agreements With U. S. Forest Service:**

The Commission of Forestry continues to cooperate with the U. S. Forest Service in accordance with suppression and detection agreements which have been in effect for a number of years. In accordance with these agreements, the Commission of Forestry furnishes protection to certain areas within the national forest boundaries in those localities where most of the land is



privately owned. In other areas within the national forest boundaries where the majority of the property is federally owned, the U. S. Forest Service resumes responsibility for protection of certain areas which normally would fall under the responsibility of the State Commission of Forestry.

## FIRE PROTECTION ACTIVITIES

### Training:

The training program carried out by all personnel is one of the necessary and valuable phases of the Fire Control Organization. It is essential that each member of the organization be thoroughly trained in order that the fire protection activities can be properly and efficiently carried out.

The vast majority of the training this year was conducted on a local basis, with emphasis on training the individual for the job for which he is responsible. Individual and on-the-job training was given all employees by their immediate supervisor throughout the year. At the regular weekly ranger-warden



Fire suppression tactics are included in the Commission's intensive and continuous training program. Here a warden, trained in such tactics backfires a plowed break in an indirect attack on the head of a fire.



meeting, training was a regular part of the meeting, along with preparation of weekly work plans and routine work. Each week during this meeting, the ranger gives some timely prepared training to his men, either individually or as a unit. District office personnel regularly attend these meetings and give supplemental training to the unit or to individuals.

The present training program is designed and tailored for the individual and aimed at improving his performance in all phases of fire control activities. This type training program has proven superior in many ways to the old large group-type meetings.

### **Inspection:**

The purpose of the unit inspection program is to determine the discrepancies of the entire unit protection program in order that a more effective training program may be carried out, thereby bringing the organization up to prescribed standards and greatly increasing the efficiency of the various activities.

These inspections are conducted by district office personnel and central office personnel. Immediately after each inspection has been conducted, a detailed report is prepared, outlining the general condition of the county and necessary measures which are needed to bring all activities up to prescribed standards.

In addition to the regular unit inspections, periodic motor vehicle inspections are conducted by the traveling mechanics. The purpose of these mechanical inspections is to determine the mechanical condition of the equipment and initiate steps to keep the equipment in a good state of maintenance and repair.

### **Fire Control Progress Checks:**

The purpose of the district fire control progress checks is to make a complete inspection of the fire control work being carried out in the districts so that training and other corrective measures can be taken for the parts of the work that are not up to desired standards. The progress checks are conducted by members of the central fire control staff.

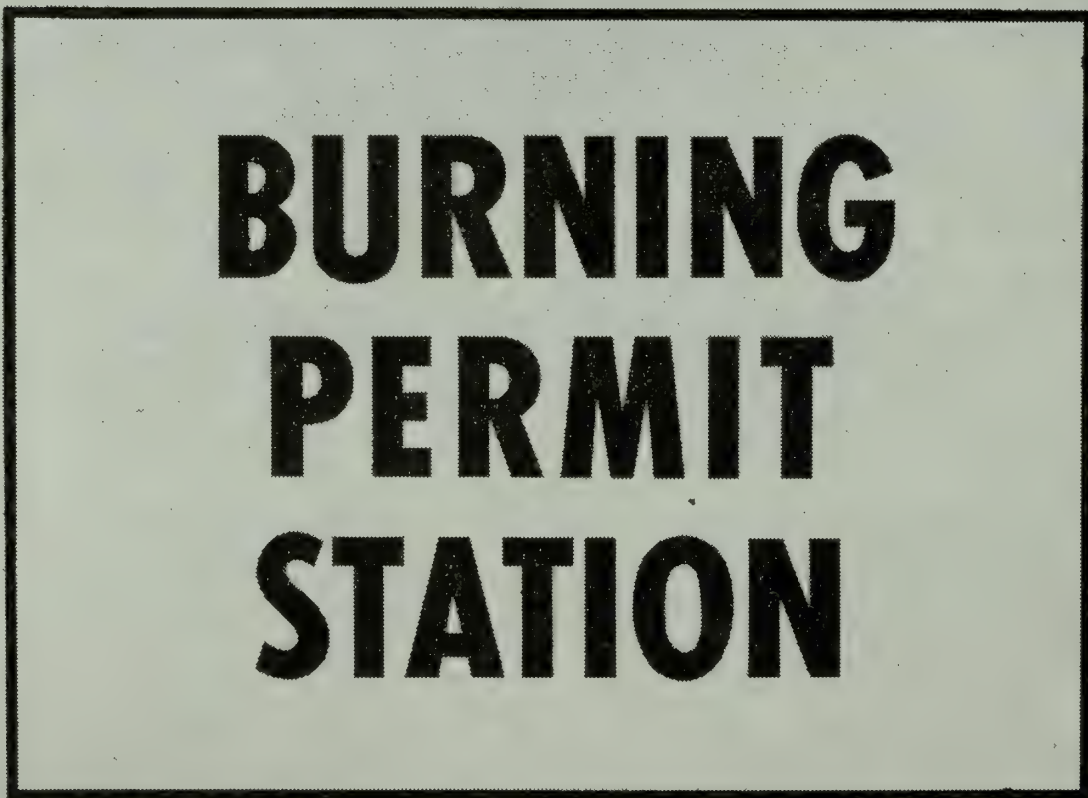
Fire control progress checks were conducted in five of the seven districts during the year. All phases of the fire control work were checked and discussed with the district personnel concerned. Immediately following the inspection, a detailed

report was written and given to the district forester. These progress checks have resulted in a better understanding of the job to be done and has increased the efficiency and progress of the fire control work throughout the State.

### **Law Enforcement:**

All illegal forest fires are carefully investigated by county unit and district office personnel in an effort to determine the responsibility of the fire. Enforcement of the state fire laws is carried out in all cases where sufficient evidence is secured. A total of 234 persons were prosecuted for allowing fires to escape to lands of others during the year. Of this total, 227 persons were convicted.

Although considerable work was done in this activity, more enforcement of state forest fire laws is needed. Continued co-operation of local magistrates is essential to a successful law enforcement program.



# **BURNING PERMIT STATION**

Either a permit or notification is necessary before any brush burning can be done in eight counties during the fall, winter and spring fire season which extends from October 15 to May 15. Numerous stations make it convenient for landowners to obtain a permit to burn or give notification of their desire to do so.



The Burning Permit Law or the Burning Notification Law, now in force in eleven counties, requires all persons to secure a permit from, or notify, the county fire control organization or an authorized agent prior to burning brush, hedgerows, woodlands, or fields during the period October 15-May 15 of each year. This law is very beneficial to the county organizations inasmuch as it supplies information to the personnel as to the location and approximate time when burning is scheduled. The landowner is also given instructions regarding safe handling of his burning operation which naturally reduces the possibility of fires escaping. The counties which now have these laws are Aiken, Orangeburg, Georgetown, Charleston, Greenville, Hampton, Clarendon, Marlboro, Williamsburg, Horry, and Colleton.

#### **Fire Plans:**

During the fiscal year, the Fire Control Branch commenced the revision of the county unit fire plans which have been in use for some time. These revisions are necessary to keep the prescribed fire suppression procedure in accordance with present-day conditions. These plans are designed to coordinate all fire control efforts within the county.

A number of similar plans were prepared for individual landowners who have expressed a desire to intensify the protection efforts on their private holdings. These landowner fire plans are closely tied in with the activities of the local county unit organization and generally conform to the outline used for the standard unit fire plans.

County prevention plans, placed into effect some years ago, were continued in use this year. These prevention plans have aided materially in the overall efficiency of the fire prevention program.

#### **Forestry Legislation:**

During the 1956 session of the General Assembly, the Legislature amended Section No. 16-317, Code of Laws of South Carolina, 1952, relating to the offenses of willfully and maliciously burning the lands of another so as to provide a penalty for willfully allowing fire to spread and to increase the penalties for such offenses. The amendment specified that any indi-





A 9-member Committee to study the Forest Fire Problems of South Carolina was appointed by Governor George Bell Timmerman, Jr., seated, and by the 1955 General Assembly. Committee members are, left to right: John D. Carroll of Lexington; Harry M. Arthur of Union; Earle R. Ellerbe of Marion; Eugene Geer of Charleston; Rep. Charles G. Garrett of Greenville; Rep. Hubert W. Smoak of Dorchester; Senator W. Clyde Graham of Florence; Senator John D. Long of Union; and James H. Graham of Summerville and Charleston, Chairman.

vidual willfully burning lands of another would be guilty of a felony; and upon conviction thereof, would be fined not less than \$1,000 and not more than \$5,000 or imprisonment for not less than one year nor more than five years and would be liable to the action of any person who may have sustained damage as a result of this type of fire.

The Legislature also extended the Legislative Committee to study the forest fire problems of the state for another year. This nine-man committee, consisting of two members of the Senate, two members of the House of Representatives, and five members appointed by the Governor, will make a report of its findings to the General Assembly during the 1957 session.

#### **Southern States Fire Control Conference:**

The Southern States Fire Control Chiefs held their annual meeting in Bay of this fiscal year at Lufkin, Texas. These annual meetings are designed to discuss fire control problems com-



mon to all of the Southern States and to formulate effective measures to increase the efficiency of the program on a region-wide basis.

### **Area and Cost Study:**

During the latter part of the fiscal year, the Commission of Forestry and representatives of the U. S. Forest Service jointly commenced a survey of all forest fire protection activities in South Carolina to determine the size and cost of the job estimated as that amount of money necessary to establish statewide adequate protection on all non-federal forest lands needing protection in the State. The major headings which were included in this study consist of cost of administration, cost of field personnel, cost of improvements, tools and equipment, and miscellaneous expenditures. After a detailed inspection of all factors essential to adequate fire protection in South Carolina, the preliminary report discloses the fact that the cost of protection on a per acre basis is considerably higher than the estimated cost five years ago. The final details of this study will be included in next year's State Annual Report.

## **IMPROVEMENTS, TOOLS AND EQUIPMENT**

### **Lookout Towers:**

There are 157 lookout towers in South Carolina. One hundred thirty-six are owned by the Commission. Twelve of the towers are wooden structures and have about reached the limit of their safe use. During the year, funds were appropriated to replace six of the wooden towers.

### **Tower Unit Buildings:**

Twenty-three of the Commission towersites are without dwellings for the tower personnel. Not much progress is being made in the maintenance of the tower dwellings and outbuildings. The Commission has sufficient available labor to handle the repair work, but much more money is needed for the purchase of the materials and supplies needed.

Modern sanitary facilities and electrical water systems are badly needed at the towersites.





Men and equipment worked at the job of salvaging telephone lines no longer needed. Two-way radio has reduced considerably the amount of telephone lines necessary to maintain good communication between forest fire control forces.



Among the many transmissions that go to all Forestry Commission radio stations throughout the state, current weather data is sent out from the Columbia headquarters daily or more frequently in bad fire weather. This aids tremendously planning fire prevention and suppression work in the counties.



### **Telephone Lines:**

Telephone line maintenance during the fiscal year 1955-56 was carried on by personnel of the Commission to the extent that pole, bracket, and insulator replacements were made as needed. Rights-of-way were kept cleared of trees and underbrush which might interfere with the operation of the lines, and transmission troubles were cleared as quickly as possible after they developed. As a result of such maintenance, the lines were kept in a very satisfactory operating condition during the year.

Commission personnel salvaged approximately 321 miles of telephone lines during the year which had become surplus to the Commission's needs because of replacement by two-way radio.

As a means of further expanding the Commission's radio system, approximately 74.0 miles of standing line structure, approximately 4,800 salvaged poles, and approximately 27.0 miles of telephone line circuit only were sold during the year. Additional radios were purchased with receipts from the telephone line and material sales and were installed in stations and vehicles affected by the sales. The Commission of Forestry was given authorization by the General Assembly several years ago to use receipts from telephone line and material sales for the purchase of two-way radio to expand the Commission's radio system.

At the end of the fiscal year, the Commission's remaining telephone system consists of 583 miles of line.

### **Radio:**

In January of 1956, an application for \$35,710 matching funds was approved by Civil Defense for additional radio equipment. This completed the basic radio program of the Commission and includes radio units for all existing tractors and wardens. With the exception of five tractors and four 31.9 Mc. base stations, all this equipment was installed prior to July 1, 1956.

Two district radio shops were established, one at Walterboro, the other at Spartanburg. This greatly facilitates the installation and maintenance of radio equipment in these two areas.

### **Use of Aircraft in Fire Control:**

The Commission early recognized the value of the use of light aircraft and for the past six years has been making use of radio-

equipped planes to supplement the towers during times when haze conditions hamper the visibility from the towers.

It has been found possible to spot many fires from the planes that could not be seen from the towers under these adverse conditions.

During one particularly bad fire condition, two planes were kept aloft almost continuously for nine straight days.

#### **Fire Danger Measurement:**

Fire control supervisors used the daily burning index and danger index ratings from the fire danger measurement stations as a guide in planning the daily activities of the various personnel. These stations, which have been in use approximately ten years, have been converted over to the "open" type which is much more satisfactory and more consistent than the old "woods" type stations. New and improved danger meters have been introduced in recent years which have contributed materially to the effectiveness of the stations. Average records for the State indicate the following number of class fire days for each of the major five ratings: 127 Class No. 1 days, 124 Class No. 2 days, 90 Class No. 3 days, 24 Class No. 4 days, and 1 Class No. 5 day. These ratings are classified from one to five so as to indicate the degree of fire danger for that particular day. A Class No. 1 day represents a condition when fires are least likely to occur. Class No. 5 days indicate the highest degree of fire danger.

### **ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS**

**(Based on Replacement Value)**

134 Lookout Tower Units .....	\$2,942,503
46 Fire Danger Measurement Stations .....	3,450
583 Miles Telephone Lines.....	174,900

#### **Radio:**

8 Remote Control Base Stations, 60 watt... @ \$1,200	\$ 9,600
1 Remote Control Base Station, 60 watt ... @ 1,800	1,800
1 Remote Control Base Station, 250 watt... @ 3,000	3,000
25 Base Station Units, 50 watt,..... @ 900	22,500
155 Base Station Units, 10, 25, and 30 watt... @ 535	82,925
260 Mobile Units (Single Channel)..... @ 425	110,500
6 Mobile Units (Dual Channel)..... @ 450	2,700
5 Portable Units..... @ 400	2,000

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235,025

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**TOTAL .....** \$3,355,878



### Equipment:

Seven (7) additional light crawler tractors equipped with fire plows and truck transports were purchased during the year and assigned to areas not previously equipped.

Nine (9) new ranger pickup trucks were purchased as replacements. Three (3) 1½-ton trucks were purchased as replacements for old transport trucks.

Seven (7) new light crawler tractors replaced seven (7) ten-year-old wheel-type tractors; and one (1) heavy crawler tractor complete with fire plow, truck tractor, and transport trailer, was purchased for an area that was without a heavy suppression unit.

One (1) new sedan delivery truck replaced an old one used by one of the traveling maintenance mechanics, and one automobile was purchased as a replacement for the radio engineer.



The "New Look" of the County Ranger's pickup included FOREST FIRE CONTROL lettering on the hood, and radio call letters on the white cab top for easy identification by air patrol planes.

# INVENTORY FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1956

<i>Items</i>	<i>Values</i>
2587 Back Pack Pumps .....	\$ 36,476
5121 Fire Rakes .....	13,058
2783 Fire Swatters .....	8,655
5 Heavy Crawler Tractors .....	50,800
1 Medium Crawler Tractor .....	7,600
37 Light Crawler Tractors .....	103,600
14 Light Wheel-Type Tractors .....	28,000
10 Heavy Duty Fire Plows .....	8,000
1 Medium Duty Fire Plow .....	450
51 Light Duty Fire Plows .....	15,912
1 ¼ Ton Jeep w/Fire Plow .....	1,850
51 Light Equipment Transport Trucks .....	122,400
6 Truck Tractors, Heavy Duty .....	21,000
6 Equipment Transport Trailers .....	16,800
47 Ranger Pickup Trucks .....	98,230
7 Sedan Delivery Trucks .....	14,000
1 2-Ton Stakebody Truck .....	2,000
3 ½ Ton Pickup Trucks .....	5,100
1 300-Gallon Tanker-Trailer w/Pump .....	1,200
1 Mobile Radio Trailer .....	2,500
<b>TOTAL .....</b>	<b>\$557,631</b>

## Equipment Maintenance Shop:

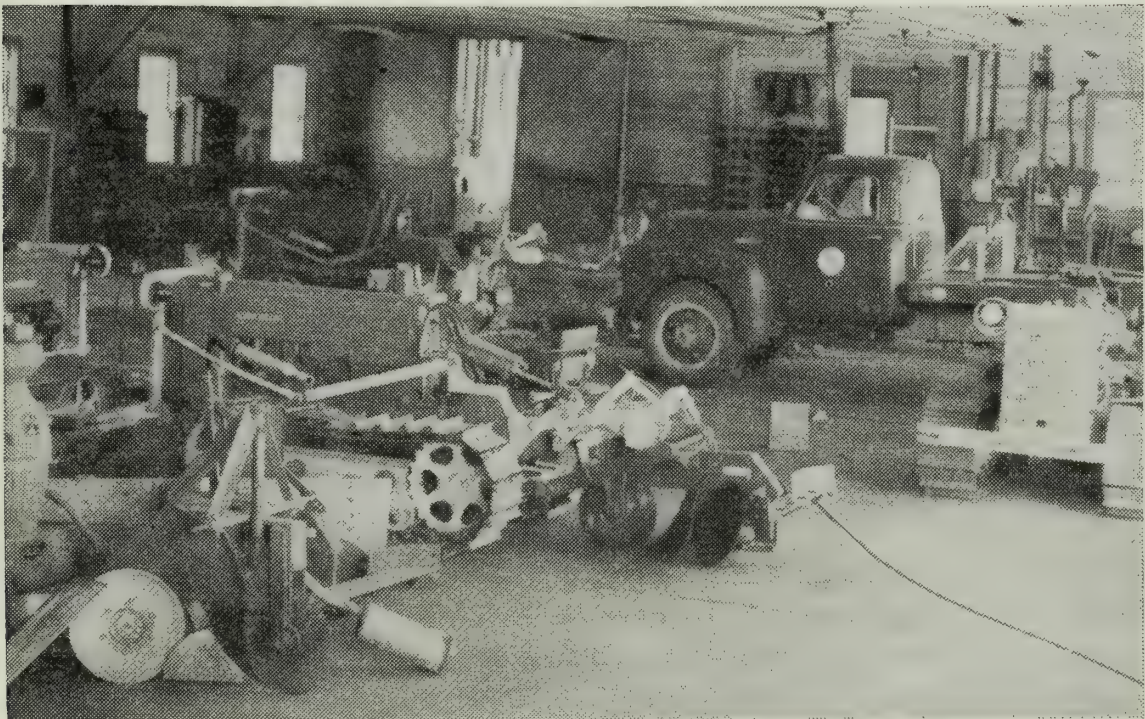
A central equipment maintenance shop is operated by the Fire Control Branch at Sumter. Heavy and specialized repairs to all fire control equipment are handled from the Sumter Shop.

Three traveling mechanics, headquartering at the Sumter Shop, handle a very intensive preventive maintenance program. These highly-trained men make periodic inspections to all of the more than 120 trucks and 60 tractors operated by the Fire Control Branch.

Listed below is some of the work handled by the mechanical maintenance force:



<i>Repairs to—</i>	<i>No. Jobs</i>
Light tractors .....	83
Heavy tractors .....	11
Light trucks .....	61
Heavy trucks .....	94
Light plows .....	8
Heavy plows .....	7
Heavy trailers .....	8
Total completed field inspections to equipment .....	581
Total field repair jobs by traveling mechanics .....	742
Total installations of fire fighting equipment on trucks .....	23
<i>Manufactured—</i>	
1 tandem axle trailer	
2 telephone reels	
1 radio shack	
7 antenna brackets (radio)	
12 hose reel baskets	
4 work benches for district radio shops	
6 fire danger station screens	
30 radio boxes for tractor radios	
1 radio emergency trailer	
6 tractor transport bodies	
1 tool house	
Modified 3 transport bodies	



Pressure on the Commission's equipment maintenance shop at Sumter is heavy during the summer and early fall. New equipment is modified and outfitted for use in woods and rugged terrain. Older equipment, after rough and continuous use during the winter and spring fire season is overhauled and brought up to standard.

## FOREST FIRE SUMMARY

The 1955-56 fire season is considered normal for South Carolina. A total of 5,594 fires burned 108,264.4 acres or 0.96% of the total forest area under protection. The average size of these fires was 19.4 acres. The summer months were relatively quiet with a low fire occurrence and acreage burned; however, the months of January, March, and April proved to be quite disastrous. These three months suffered quite a deficiency in the total amount of precipitation; and this drought condition, linked with brisk winds usually experienced at this time of year, created hazardous burning conditions. All fires were handled very efficiently by county fire fighting forces with the cooperation and assistance of numerous volunteers. The availability of more and better mechanized equipment aided materially in placing these fires under control. The highest rate of fire occurrence was experienced in Orangeburg County where 360 fires burned 8,391 acres of timberland. Other counties with high rates of fire occurrence and acreage burned were Aiken with 205 fires burning 2,044 acres; Berkeley with 207 fires burning 2,011 acres; Clarendon, 207 fires which burned 3,190 acres; Florence, 211 fires which burned 2,002 acres; Horry, 204 fires which burned 6,399 acres; and Richland with 193 fires burning 2,298 acres. Those counties which experienced less than 30 fires for the fiscal year 1955-56 were Abbeville, Cherokee, Chester, McCormick, Newberry, Pickens, Saluda, and Union. With the exception of Pickens County, the area burned averaged considerably less than 500 acres for the year.

Again this year, the major causes of forest fires were attributed to smokers, debris burning, and incendiarism. These three causes were responsible for 85% of all the fires which occurred during the year.

With the exception of three months, the entire fiscal year 1955-56 experienced a deficiency in precipitation. The total rainfall for the State averaged 43.16 inches which represents a departure of 4.01 inches below normal. The average amount of rainfall experienced over the State and the deviation from normal by months is shown below:



<i>Month</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
July -----	5.67	— .18
August -----	4.39	—1.26
September -----	5.45	+1.29
October -----	2.37	— .45
November -----	2.29	— .04
December -----	.83	—2.72
January -----	1.78	—1.66
February -----	6.35	+2.33
March -----	3.81	— .20
April -----	4.26	+1.01
May -----	2.75	— .74
June -----	3.21	—1.39
<b>Total</b> -----	<b>43.16</b>	<b>—4.01</b>

A five-year summary of precipitation by fiscal years is shown below. Note that a deficiency has been experienced each year.

#### SUMMARY OF PRECIPITATION—FIVE-YEAR PERIOD

<i>Year</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
1951-52 -----	45.79	—1.75
1952-53 -----	44.42	—1.97
1953-54 -----	40.38	—6.98
1954-55 -----	37.69	—9.57
1955-56 -----	43.16	—4.01
<b>Average</b> -----	<b>42.29</b>	<b>—24.28</b>

#### Legal Fires:

Each year, large areas of forest land are intentionally burned by landowners or their authorized agent. A total of 1,317 fires burning 138,634 acres were recorded by the local county personnel during the fiscal year. A total of 390 fires burning 34,192 acres were attributed to landowners' desires to reduce forest fire hazards. For the production of game birds and improvement of shooting conditions, 198 fires burning 85,224 acres were conducted. One hundred seventy-six fires were started to rid timber areas and/or potential forest land of accumulated debris and rubbish. These debris fires burned 2,405 acres. Three hundred fifty-five fires burning 10,943 acres were handled on woodland pastures. One hundred ninety-eight fires burning 5,870 acres were conducted for miscellaneous purposes such as boll weevil eradication, destruction of snakes, ticks, insects, etc. Even though a number of these fires are handled under technical supervision, the vast majority of these so-called legal fires have proven quite destructive to timberland areas; and no consideration is given to the potentialities which exist on these timber-productive areas.





Thousands of acres of private land in South Carolina are being cleared of scrub oak and planted to pine. Many years of experimentation on State Forests has led the way in developing techniques to bring this idle land back into production.



## FOREST MANAGEMENT

### Management Assistance:

The major emphasis of the Forest Management Branch activities was again directed towards assisting private landowners with their woodland management problems.

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing foresters to help landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, and reforestation measures needed.

In cases where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement and a sample timber sale agreement. The charge for this service is fifty cents per thousand board-feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

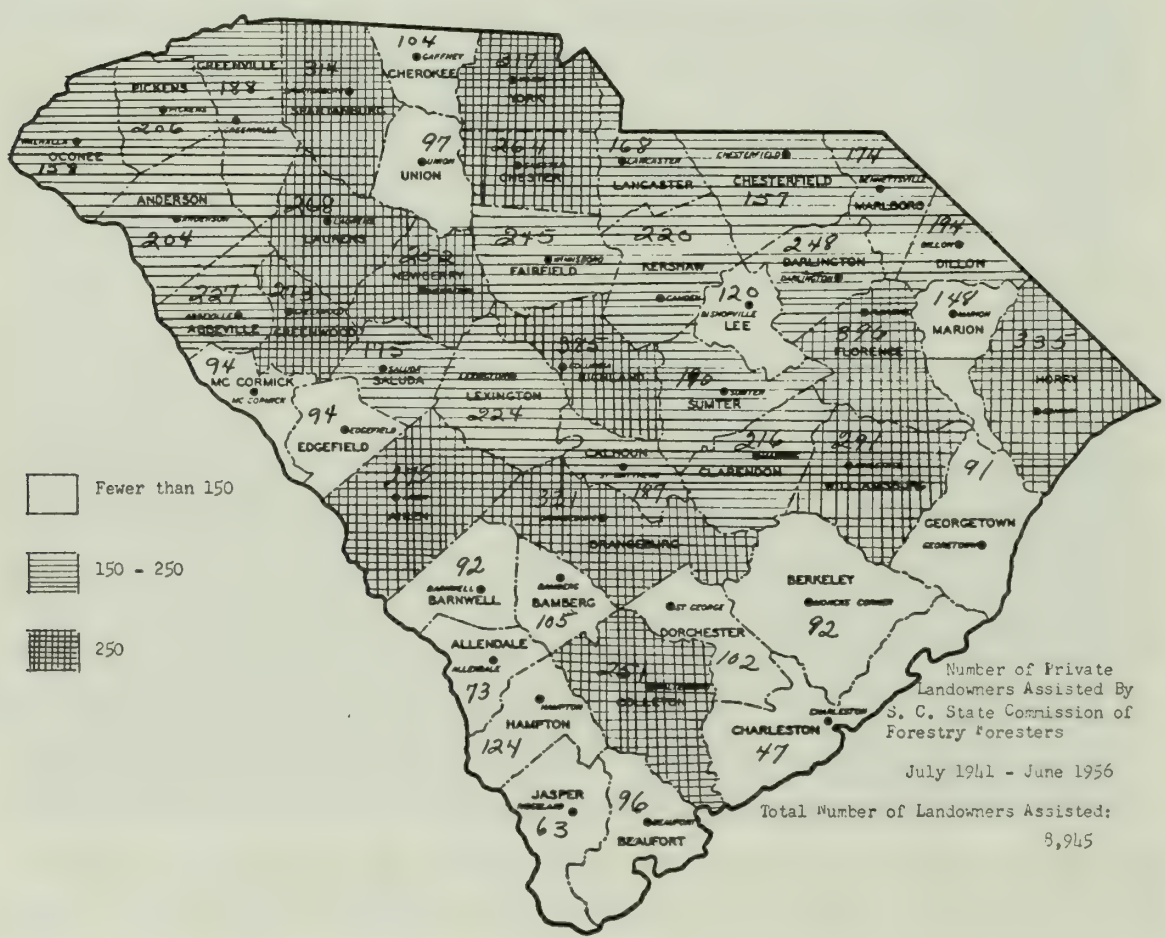
In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a distinctly technical measure and involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day, and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seed bed preparation, and control of the "Brown Spot" disease in longleaf pine. Recommendations for the use of prescribed fire are made only after a very careful analysis, with the landowners, of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

Timber Stand Improvement recommendations are also included in the woodland examination writeup. This would include measures necessary to replace the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees.

In addition to the on-the-ground service as noted below, a large number of requests for general information were answered by the central and district offices' management staffs. These requests included information on scrub oak control, timber stand survey information, industry location data, etc.

During the year Commission Foresters made 1,322 woodland examinations on 191,143 acres of forest land, and selectively marked a total of 16,246,795 board feet and 9,167.0 cords for 393 landowners on 10,973 acres of forest land. The following table shows the continuous increase in woodland examination and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature.

Commission Foresters and Extension Foresters again followed the policy of referring all of the larger jobs and some of the smaller jobs to consulting and industry foresters wherever practical. Our records indicate 140 jobs referred to consulting foresters where properties were examined by Commission or Extension Foresters and it is estimated that as many more jobs were referred direct to consulting foresters where original contact was made by Commission or Extension personnel.





## SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	.....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-46 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
1950-51 .....	998	173,057	339	14,275	19,634,153	3,896
1951-52 .....	919	170,948	288	11,931	18,031,822	3,088.6
1952-53 .....	931	142,054	315	12,109	16,332,715	3,935
1953-54 .....	945	143,347	331	8,864	12,264,641	8,467
1954-55 .....	1,166	184,754	399	9,477	13,875,377	5,162
1955-56 .....	1,322	191,143	393	10,973	16,246,795	9,167
TOTALS .....	9,950	1,976,926	3,403	188,627	255,166,263	52,545.2

Prices received from marked sawtimber for the past five years are shown in the following table:

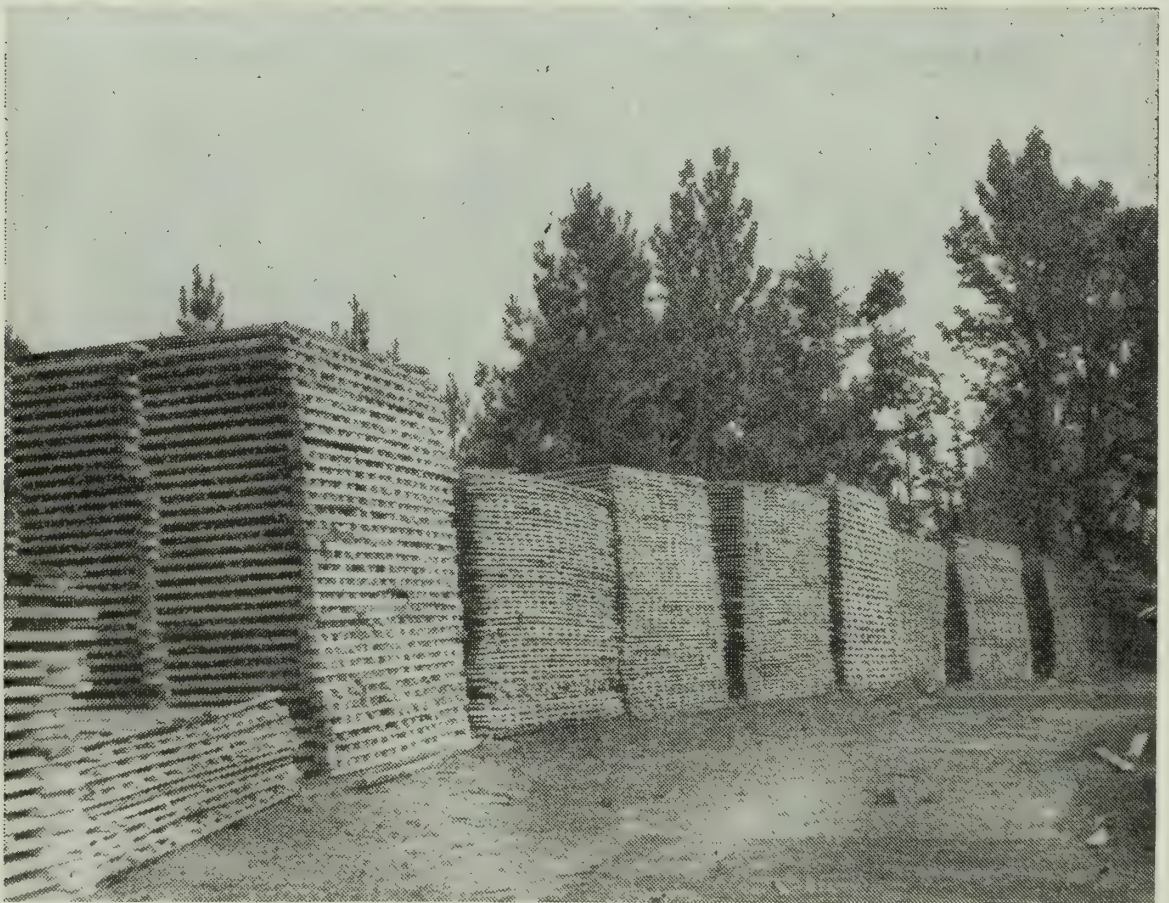
TIMBER SALES SUMMARY FOR SOUTH CAROLINA  
FIVE YEAR PERIOD

<i>Fiscal Year</i>	<i>No. Sales On Record</i>	<i>Weighted Average Price Received Per M. Bd. Ft.</i>
1951-52 .....	114	\$33.02
1952-53 .....	100	35.53
1953-54 .....	54	31.53
1954-55 .....	86	32.50
1955-56 .....	104	35.91

Timber prices remained good throughout the year and there was very little change in demand, with stumpage prices for all types and qualities of trees in good demand. High quality timber brought premium prices and was very much in demand. The average price paid for marked timber was considerably above that paid for timber on "lump sum" or "boundary sales".

Pulpwood prices increased generally throughout the state during the year. The demand for pulpwood remained strong. Stumpage prices for pulpwood of up to \$6.87 were received, with a considerable number of sales going over \$6.00. The greatest





A new high in pulpwood production was reached in South Carolina last year and saw-timber production was estimated to be above that of the last three years. Continuing high prices and demand for forest products stimulates greater interest in all phases of forestry in South Carolina.



increase of pulpwood production occurred in the Piedmont and mountain counties.

There was very little change in pole prices during the year, with demand steady; however, there was some increase in demand for small poles (barn poles) and fence posts.

The Forest Management Training School that has been held each year for the past six years was not held this spring. It is planned to incorporate this with a training school for the County Rangers, to be held in early fall. A training school was held for private and industrial foresters. Arrangements for this school were made by the Forest Management staff in the central office, and facilities were made available for the group at the Burnt Gin Group Camp at Manchester State Forest. H. R. Tomlinson, of the U. S. Forest Service was the instructor. The group concentrated their study on bottomland hardwood management. The Commission assisted with this school, since it is believed that it is a part of the Commission's duty to assist in supplying up-to-date information to all foresters who will be working with South Carolina woodlands, in order that the best technical help possible is available to South Carolina landowners.

#### LUMBER AND PULPWOOD PRODUCTION BY YEARS

1942	1,079,351 M bd. ft.	946,000 Cords
1943	984,773 M bd. ft.	985,000 Cords
1944	850,748 M bd. ft.	1,053,000 Cords
1945	723,667 M bd. ft.	877,500 Cords
1946	1,005,700 M bd. ft.	955,700 Cords
1947	871,014 M bd. ft.	948,388 Cords
1948	798,700 M bd. ft.	1,108,523 Cords
1949	1,002,000 M bd. ft.	1,012,180 Cords
1950	997,000 M bd. ft.	1,182,413 Cords
1951	1,100,000 M bd. ft.	1,251,045 Cords
1952	958,000 M bd. ft.	1,275,698 Cords
1953	921,000 M bd. ft.	1,446,157 Cords
1954	950,000 M bd. ft. est.	1,330,888 Cords
1955	1,000,000 M bd. ft. est.	1,513,313 Cords

The production of sawtimber was probably not quite up to 1949 and 1951 output; however, it is estimated that the production was above that for 1952, 1953 and 1954. Final figures on

this production are not available as yet. The production of pulpwood was up considerably over 1954. In fact, a new high in pulpwood production was reached. With the expansion programs at the existing mills and with at least two new pulp mills to be constructed within the near future in South Carolina, the demand for pulpwood will probably increase considerably within the next few years. The use of hardwood for pulp almost doubled in 1955.

It is still difficult and, quite probably, will remain difficult for the sawmill operators to find large, high quality, logs. The average size log now being delivered to the sawmills is smaller than in past years. The trend in management is towards shorter rotations and it is probable that most landowners will not attempt to grow large, top quality, logs but will harvest their timber on a shorter rotation for pulpwood and small sawtimber. The objective of the Forestry Commission's landowner assistance program is to help landowners to grow larger and better quality poles, pulpwood and sawtimber through proper management practices, with the goal of obtaining the highest financial returns for the landowner.

There was very little change during the year of the number of forest products industries operating in the state. At least two large mills have ceased operating since March, 1956 when the \$1.00 minimum wage went into effect. These two large mills are now selling stumpage from their holdings.

There was a continued increase on the part of forest industries to manage their own land properly. Most of the companies who own considerable acreages are now hiring either full- or part-time foresters, in an effort to keep their woodlands producing the largest possible volume of higher quality products.

The pulp companies continued to furnish the services of their conservation foresters to assist landowners with proper thinning of pulpwood. It is the responsibility of these foresters to help sell private owners on the idea of "sustained yield" in managing their woodlands. According to estimates received from the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

Commission Foresters in the field offices and in the central offices checked approximately 500 separate properties for insect



and disease damage. Recommendations were given the owners as to what treatments were necessary to control or check the spread of the disease or insects. There were no epidemics of disease or insects during the year; however, the Ips and Southern Pine Beetle attacks almost reached epidemic stage during the fall of 1955 in the Piedmont and mountain sections. A check for Oak Wilt was continued, but none was located in South Carolina.

### REFORESTATION

A total of 33,024,150 seedlings were produced and distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly Pine .....	17,844,000
Slash Pine .....	14,705,400
Longleaf Pine .....	280,050
Red Cedar .....	183,050
Species for Experimental Plantings .....	11,650

In addition to the above, 75,000 Loblolly seedlings were obtained by the U. S. Forest Service from Georgia and were planted on the watershed areas of Pickens County. Also, private industries obtained a known 1,300,000 Slash pine and 15,000 Loblolly pine seedlings from North Carolina direct. In addition, also, there were 8,518,000 seedlings planted in the A.E.C. project in Aiken County, which brings the total planted for the fiscal year 1955-56 to 42,931,550.

The production of trees was again about three million in excess of the average that should be produced with the present facilities at Wedgefield. An effort was made to squeeze the top production from the nursery in order to more nearly meet the demand for trees. Some additional funds were made available to increase soil maintenance programs and to expand the actual area in production. The over production for the past two or three years, however, had depleted the soil to the extent that it will require an additional year or two to bring back to top fertility all of the seed bed areas.

Orders were received last year for approximately 47 million trees. In order to furnish some trees to all who ordered, it was necessary that a 40% reduction be made in all orders received.

Tables ---- and ---- in the Appendix show a record of seedlings distributed by counties and class of ownership. Also Table ---- shows accumulated acres planted by counties and acres in need of planting. The following table shows the number of seedlings planted in South Carolina by years:

1928-29 -----	142,000
1929-30 -----	148,000
1930-31 -----	986,000
1931-32 -----	976,000
1932-33 -----	996,000
1933-34 -----	1,031,000
1934-35 -----	7,529,000
1935-36 -----	23,000,000
1936-37 -----	22,000,000
1937-38 -----	11,192,000
1938-39 -----	10,854,000
1939-40 -----	12,244,000
1940-41 -----	21,165,423
1941-42 -----	10,275,037
1942-43 -----	4,742,010
1943-44 -----	5,662,608
1944-45 -----	1,926,840
1945-46 -----	6,402,255
1946-47 -----	1,962,600
1947-48 -----	11,356,990
1948-49 -----	30,338,775
1949-50 -----	29,501,955
1950-51 -----	20,615,315
1951-52 -----	16,619,000
1952-53 -----	22,035,850
1953-54 -----	36,210,100
1954-55 -----	35,373,025
1955-56 -----	34,413,550
<hr/>	
TOTAL -----	379,699,333

This was the ninth year of nursery operations at Wedgefield. During this time the nursery has produced and distributed 240,-671,960 seedlings. Average annual production was 26,741,328. The production and distribution costs, including depreciation on capital improvements, amounts to \$2.63 per thousand for this





Cone collection is a seasonal but lucrative business to some citizens of South Carolina who assist in securing the thousands of bushels of cones needed to extract seed for planting.

nine-year period. This does not include central office overhead and field foresters' time in distribution and other activities relating to the program. The total costs, including all overhead and operations, amounts to approximately \$3.00 per thousand.

During the year some expansion of acreage was undertaken, with approximately eight additional acres being brought into production. This eight acres, plus 16 acres that were brought in two years ago, needs considerable soil maintenance work before it can be made productive.

The most important bottlenecks to increased tree production at Wedgefield continue to be soil maintenance and seed collection. The construction of adequate cone storage and seed extraction facilities and increased soil maintenance work will receive priority during the next year.

The following cones were collected during the fall of 1955: 4,763 bushels of slash pine; 520 bushels of longleaf pine; 9,561 bushels of loblolly pine; making a grand total of 14,844 bushels of cones collected. In order to store these cones, it was neces-



sary to rent 24,000 square feet of space in a tobacco warehouse, and use the group camp at Burnt Gin, plus all available facilities at the nursery. From the above cone crop 4,316 pounds of slash pine seed, 514 pounds of long-leaf seed, and 8,176 pounds of loblolly seed were extracted. This was the largest amount of seed ever collected in one season at the Wedgefield nursery. In addition to the above, 4,000 pounds of loblolly seed and 1,000 pounds of slash pine seed were purchased from the Southern Seed Company, Baldwin, Georgia. Arrangements were made to buy 3,000 pounds of loblolly pine seed from the Southern Seed Company in 1956-57. West Virginia Pulp & Paper Company supplied the nursery with 2,000 pounds of loblolly and 400 pounds of slash pine seed. Champion Paper & Fibre Company supplied the nursery with 70 pounds of loblolly seed.

After planting for the 1956-57 crop, the balance of seed on hand in cold storage is as follows:

Slash 5,107 pounds  
 Longleaf 350 pounds  
 Loblolly 11,511 pounds  
 Virginia Pine 1 pound  
 Shortleaf Pine 7 pounds

With the expected increase in production to 60 million trees annually or more, it is imperative that additional seed extraction facilities be made available.

## COOPERATIVE FOREST MANAGEMENT

During the fiscal year nine cooperative forest management projects were operated in the state. A summary of work accomplished by C. F. M. Foresters is included with the data for each district.

### WATERSHED PROJECT

A pilot watershed project was operated on the Twelve Mile Creek Watershed area in Pickens County, in cooperation with the Federal Forest Service and the Soil Conservation Service. A total of 765,000 trees were planted on badly eroded and gullied areas within the project boundaries and many check dams built to help control the erosion until a permanent vegetative cover can become established on these badly eroded sites. In addition to these duties, the project forester also assisted many land-



owners within the county with their forest management problems, including timber and pulpwood marking, sales, undesirable hardwood control, or any other forestry practices needed. The report of private landowners assisted is included in the report of examinations and marking services as shown on the preceding pages.

### STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

Cassatt State Forest—462 acres

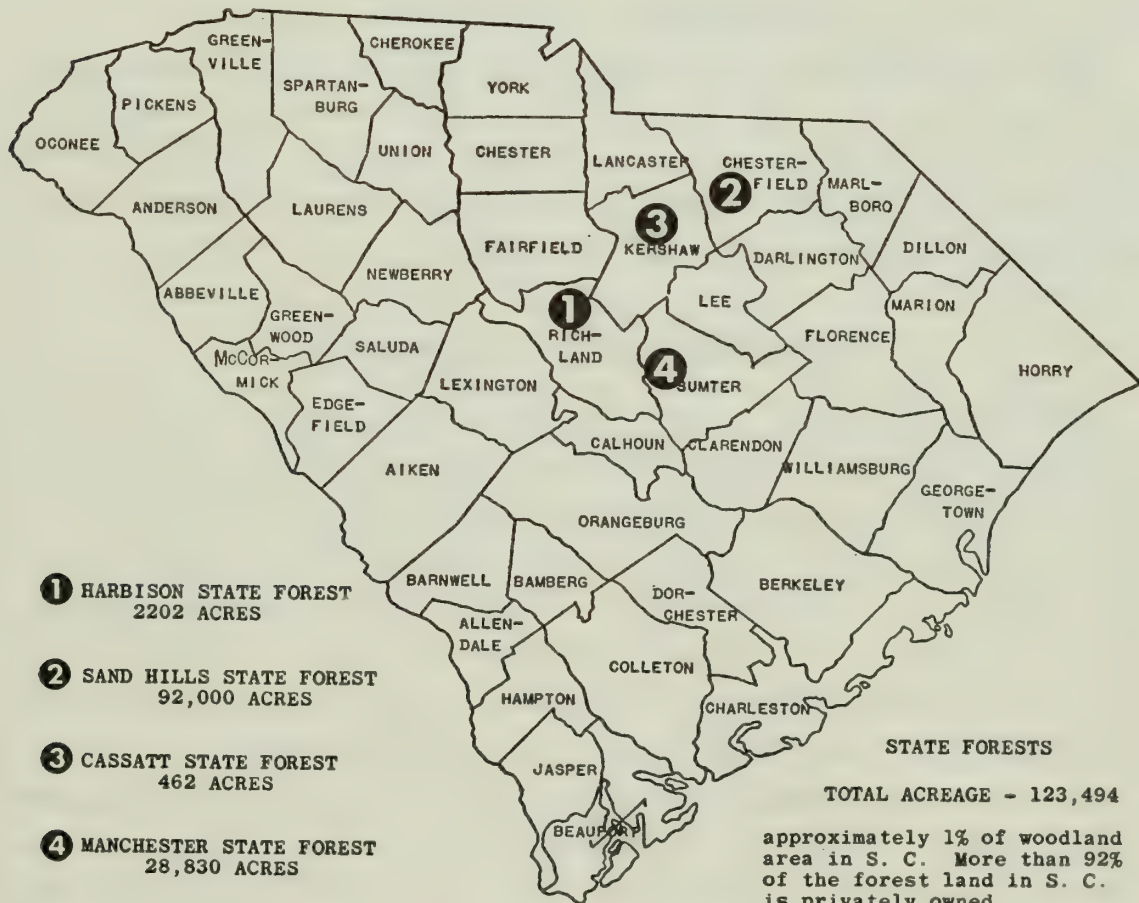
Harbison State Forest—2,202 acres

Manchester State Forest—28,830 acres

Sand Hills State Forest—92,000 acres

Total—123,494 acres

Prior to acquisition by the state most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed towards building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.



The primary silvicultural objective is the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops in order to reduce the competition so that pine will survive and grow. Approximately 2,800 acres of scrub oak lands have been cleared and replanted to pine through fiscal year 1955-56.

Detailed reports of activities on each of the State Forests follows:

### **CASSATT STATE FOREST**

Cassatt State Forest in Kershaw County comprises 462 acres composed primarily of scrub oak land and abandoned fields. Thirty-four thousand Slash pine seedlings were planted in abandoned fields on this property in 1953-54, which completed the planting of old abandoned fields. Future plans include the clearing of the remaining scrub oak lands on the forests, approximately 300 acres, and planting to pine.

Personnel from the Sand Hills State Forest maintained boundary firebreaks on the Cassatt State Forest.

### **HARBISON STATE FOREST**

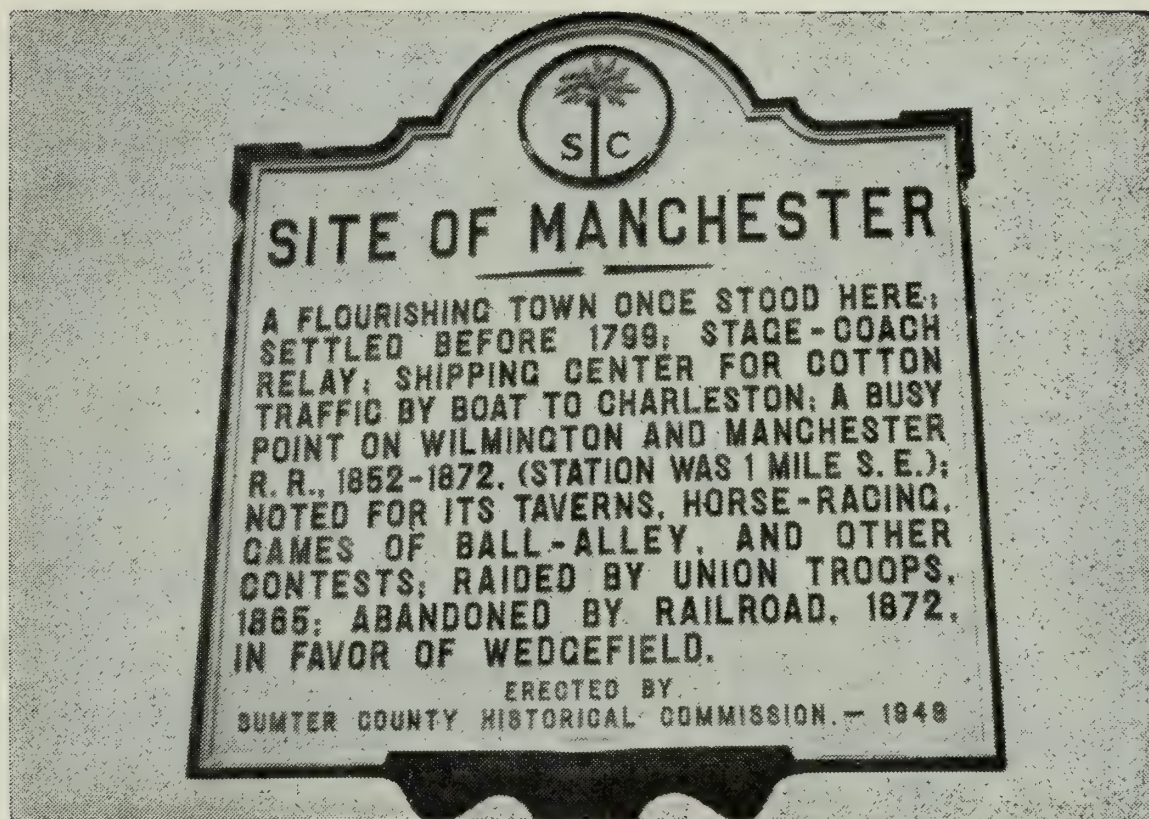
Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland Unit Fire Control Organization is responsible for fire protection and is assisted by the Caretaker, Mr. Roofe Lowman. One fire occurred on the forest during the year which burned 46 acres.

### **MANCHESTER STATE FOREST**

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state, effective June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat, and to get all records of transfer completed. A boundary survey is in progress now.

Approximately one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up





The Manchester State Forest was named for the town of Manchester described on this marker located on Highway 261 between Wedgefield and Pinewood.

the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak and reclaiming it for pine production.

#### **Fire Protection:**

Only three fires occurred which burned 12.1 acres during the year. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining the area in the prevention, presuppression and suppression of forest fires. This fire record is one of the best ever posted for Manchester State Forest.

Approximately 360 miles of firebreaks were maintained or constructed during the year.

#### **Recreation:**

Burnt Gin and Mill Creek Group Camps were operated and maintained by the Parks Division. A detailed report on these two camps will be found in the Parks Division section of this report.

**Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

**Agriculture:**

Forty-four tenants rented 1,471 acres of land for agricultural purposes during the year. Some of these tenants work part-time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, approximately 425 acres of newly cleared scrub oak land was rented for one season to watermelon growers.

**Road and Truck Trails:**

During the year 26 miles of truck trails were machined and washes filled, a number of bridges repaired and diversion ditches cleaned.

**Management Plan:**

A complete cruise of the Manchester State Forest was made in November and December of 1955. The purpose of this cruise was to determine more definitely which areas were understocked, where timber cutting operations should be carried out, and other pertinent information necessary to make a complete management plan of the property. This management plan has not been completed; however, immediate cutting plans have been made, based on the information obtained during the cruise. Within the next twelve months a complete plan will be made which will show approximate amounts of sawtimber and pulpwood that can be cut from the forest annually in accordance with good forestry practices. A major consideration in making this plan will be to increase the growing stock so that the maximum is obtained from each acre on the forest.

**Tree Planting:**

A total of 373,000 trees were planted on the forest during the year. These included 359,000 Slash Pine, 5,000 Loblolly Pine,



5,000 Longleaf Pine, and 4,000 Red Cedar. Practically all of the above plantings were made by machine in the brush-cut and cleared areas, and only a few thousand were planted in old fields.

### Forest Products Sold:

Forest products sold during the year included the following:

Sawtimber (board feet) .....	172,846
Pulpwood (cords) .....	1,285.93
Posts (standard cords) .....	402.2

### Telephone Lines:

Twenty-seven miles of telephone lines in the forest system were brushed and maintained during the year. A number of breaks were repaired and general maintenance carried out to keep the telephone system in good working order.

### Silvicultural Practices:

Again the major silvicultural activity was the conversion of woodland scrub oak areas to areas suitable for planting of pine. Since this brush clearing and plowing operation is a continuous one, there are some areas that had the brush removed in 1954-55, that were completed and plowed in 1955-56. Approximately 425 acres were cleared and plowed ready for renting to watermelon growers for one season. Some areas which had been rented to watermelon growers in 1954-55 needed a replowing before planting could be done. Listed below is a summary of activities in this work:

Brush cutting .....	300 acres
Brush piled and burned .....	605 acres
Plowed .....	1,295 acres

Prescribed fire was used in three stands on the forest and a total of 94 acres burned. These particular fires were for hazard reduction purposes. It is planned to use fire for scrub hardwood control, hazard reduction, disease control, and seed bed preparation, if it is determined that this would be the best and most practical treatment.

Desirable seedlings were released by cutting the overtopping undesirable trees on a 79-acre area.

Manchester State Forest personnel collected 10 bushels of long-leaf pine cones and 15 pounds of Southern White Cedar seed for use at the nursery.

### **Maintenance and Repair:**

A large number of small maintenance jobs were completed on tenant houses and headquarters buildings. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair, except for the roof on the equipment shed. It is planned to re-roof this building in 1956-57.

A complete overhaul was necessary on the TD-9 tractor. This overhaul job cost approximately \$1,000; also one pickup truck and one 1½-ton stake body truck were traded and new equipment secured. At least one truck should be traded during 1956-57 and a D-6, or equivalent horsepower, tractor should be purchased as soon as possible.

### **Shaw Air Force Base Lease:**

The U. S. Army Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until June 30, 1962. The State Forestry Commission will be paid \$3,074 per year for this lease.

The Air to Ground target practice on this area caused at least one fire which burned approximately 670 acres. Damage on this fire was heavy. A salvage operation is now going on in an effort to salvage as much as possible of the usable sawtimber and pulpwood, and in addition, to check the spread of beetle activity that is developing in this burned area.

## **SAND HILLS STATE FOREST**

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S.





More than 2,600 acres of land on South Carolina State Forests have been cleared of scrub oak and brush and planted to pine.

Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease agreement.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing of the forest stand. Almost half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultural objective at present.

### **Tree Planting:**

All planting was done by machine except for some experimental longleaf planting. All plantings were made in clearings. All of the old fields on this forest, except those being farmed, have now been planted to trees. A total of 303,000 slash pine were planted and a few thousand longleaf pine in experimental areas.



### Forest Products Harvested:

The following products were harvested from the Sand Hills State Forest during the year:

Pulpwood -----	1,582.08 cords
Posts -----	12,504 pieces

Cutting will be stepped up as the young pine stands reach thinning size and age. No sawtimber sales were made during 1955-56; however, the sawtimber cuttings will be made as the young stands reach sawtimber size and also some salvage of older timber will be made for sawtimber as soon as it has served its usefulness as seed trees.

### Fire Protection:

During the year 20 fires burned 256.7 acres. This is the second best record since the forest was established in 1939, and a very low fire loss for this type area. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hill State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield Unit, Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, presuppression and suppression of forest fires.

A total of 77.5 miles of firebreaks were plowed on the forest.

### Recreation:

The Sugar Loaf Mountain Recreation Area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking area and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing, but no swimming is allowed.

The Parks Division continued improvement work on Campbell's Pond, Negro State Park. This area received heavy use



during the year. A more detailed report will be found in the Park Section of this report.

### **Fish and Wildlife:**

No hunting was allowed on the area during the year. Fishing is allowed without permits in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell's Pond. Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

### **Agricultural Lands:**

Seventeen tenants rent and farm 1000 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

During the past five years more than 803 acres of land have been rented to watermelon growers following the clearing of scrub oak from the area. Present plans are to continue to clear scrub oak lands and rent them one year to watermelon growers and then plant them to pine.

### **Roads and Truck Trails:**

During the year 50 miles of truck trails were graded, brushed out, and washes filled in. Four culverts were repaired and three timber bridges redecked. Fifty diversion ditches were cleaned out.

### **Silvicultural Practices:**

A total of 153 acres of scrub oak was cleared with the brush cutter and/or cable, and plowed with the Athens Plow.

A number of experimental plots have been established using various poisons and concentrations in an effort to determine the most practical method of eliminating scrub oak competition so that pine can become established.

Records were maintained on thinning plots established in 1950.

**Maintenance and Repair:**

The Sugar Loaf Mountain Recreation Area was maintained and all facilities in the area are in very good condition. The general condition of headquarters and director's residence is good; however, a number of the tenant houses are in need of considerable maintenance work.

**Boundary Surveying:**

A Cadastral Engineer was sent by the Atlanta office of the U. S. Fish & Wildlife Service to continue work on boundary surveys for the forest; however, there are many more miles yet to be run to completely establish all boundaries. This surveying was done on an area where there was some dispute about the location of the Sand Hills State Forest lines. More work is planned for July and August of 1956.

**EXPERIMENTAL STUDIES**

In cooperation with the Santee Branch, Southeastern Forest Experiment Station, several experimental studies have been set up aiming toward the development of nursery and planting practices needed to insure survival and early growth of planted longleaf pine in the scrub oak areas of the Sand Hill Regions of the state. This work is being done on both the Sand Hill State Forest and the Manchester State Forest. Many of these experiments were set up during 1953-54 and were continued over to this year.

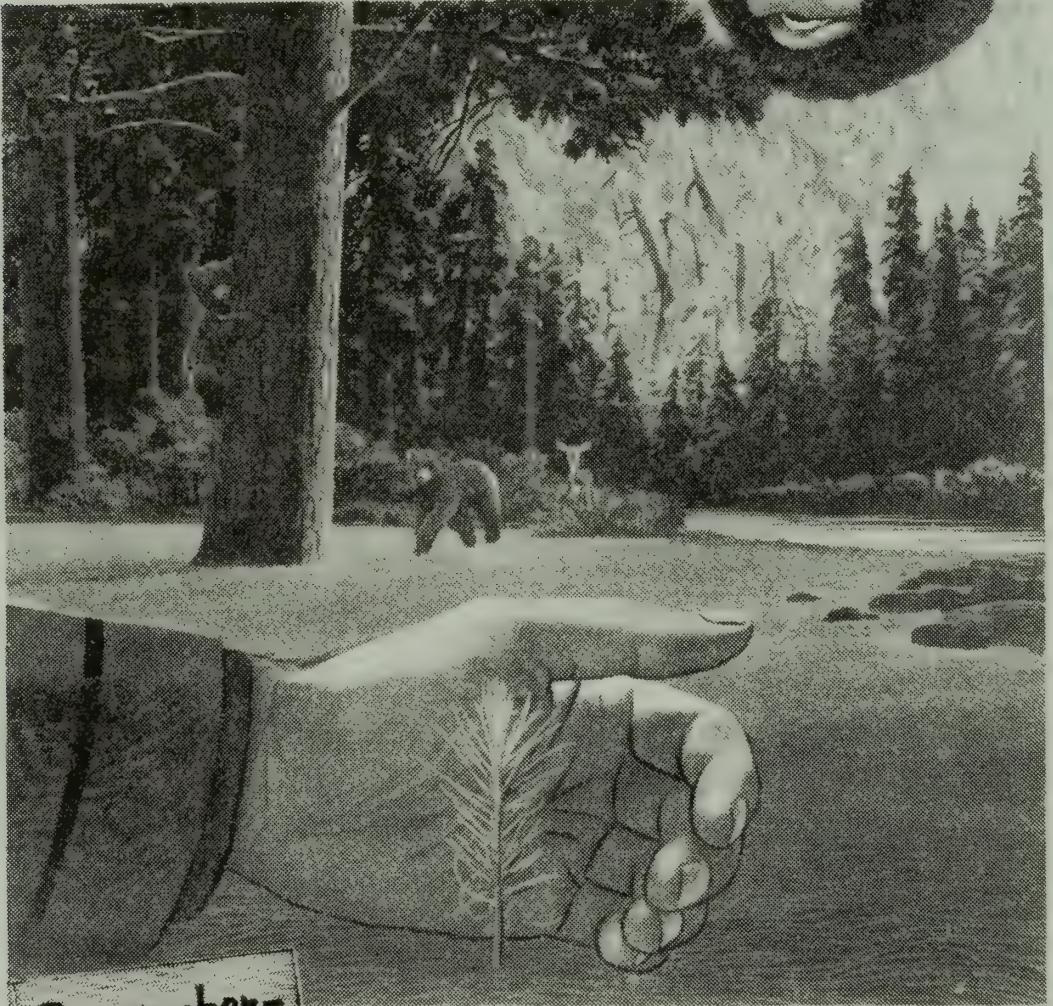
The studies include:

1. Tests of nursery treatments involving fertilizer, seedling stand density, and root pruning for development of drought-hardy longleaf pine seedlings.
2. Effect of seedling grade, seedling treatment and season of planting upon early survival of longleaf pine.
3. In typical planting localities tests of longleaf pine stock from local seed sources as to survival, growth rate and other characteristics which may effect suitability for planting.



4. Determination of the effect of various degrees or treatment of scrub oak cover on soil moistures and longleaf pine survival.
5. Tests by seedling grades the effect of root length upon survival of longleaf pine.
6. Comparison of older longleaf pine seedling stock (2-0), transplant stock (1-1), and regular planting stock (1-0) as to survival and early growth.
7. Tests of the effect of season of application in chemical treatments to control scrub oak in longleaf pine planting sites.
8. Tests of species suitable for Sandhill planting on cleared land.
9. Effect of furrowing depth, clearing, and poisoning scrub oak on longleaf pine survival.

# Carelessness Kills Tomorrow's Trees, Too!



Remember-  
Only you can

## PREVENT WOODS FIRES!

South Carolina's own "little tree" was featured on the basic poster of the 1956 nationwide Cooperative Forest Fire Prevention Campaign. It is the fourth consecutive year that the Commission's emphasis on "Even little fires kill little trees" has been used in some form in the nationwide program.



# INFORMATION AND EDUCATION

## INTRODUCTION

The principle of informing and educating the people of South Carolina as to forest conservation and State Parks problems and opportunities is a guiding principle of the S. C. State Commission of Forestry.

The information and education program of the S. C. State Commission of Forestry is directed toward carrying out the functions of the Commission in protecting our forest from fire, encouraging wise management and use of our forest resources, and creating an understanding and an appreciation of the value and proper use of State Parks areas.

The job of the Forestry Commission involves not only trees, but people. It might truly be said that the work of the Commission is *of*, *by*, and *for* people.

South Carolina's system of State Parks exists to serve the recreational needs of people, and it is serving some three million people every year.

Because 93% of the forest land in South Carolina is in private ownership, it is obvious that people must know forestry facts and techniques in order to turn forestry problems into opportunities. The need for solving these problems is pointed up by the fact that even though the forests of South Carolina support the state's second largest industry (next to textiles), the forests are producing at less than half of their potential capacity. When people realize the potential value of woodland production and apply practical methods of conservation and wise use, the amount of timber available for commercial use can be more than doubled. Practically all of the problems of forest conservation in South Carolina can be solved only through the efforts of the people who own the land and the general public.

The adoption of known techniques in forest conservation not only would assure the future supply of existing wood-using industries, but also the increased supply would permit an expansion of this important part of the economy of South Carolina.

South Carolina's forestry problems are problems both of trees and people. People cause 99% of our forest fires, and the poor

cutting practices and the large amount of understocked or idle land reflect problems of people. The solutions to these problems lie with people, and the information and education program, as well as the fire control, forest management, and state park programs of the Commission are directed to people.

The aim of the Commission's information and education program is to get forestry and state park information to people so that the problems can be turned into opportunities. The informational and educational efforts are keyed to the following points:

1. Forest Fire Protection

More than 5,000 illegal woods fires occur every year in South Carolina and 99% are caused by people.

Landowners burn their own woods or permit their woods to be burned in all too many cases.

2. Unwise cutting practices mean low production and inferior forest products.
3. Some one and one-third million acres of idle land or unproductive forest land should be planted to trees.
4. Species of inferior quality occupy much of the existing forest land in the state. These inferior trees must be replaced with trees of good quality to achieve full woodland protection.
5. Full use, appreciation, protection, and support of South Carolina's State Parks program which serves some three million people annually.

## FOREST FIRE PREVENTION

The guiding philosophy of forest fire prevention as carried out by the Commission directs major emphasis to the damage caused by the average slow-burning quiet fires that South Carolinians are accustomed to seeing. This damage has been emphasized in terms of little trees hidden from the eye of the casual observer and destroyed in any fire that burns the grass or woods litter close to the ground.

This approach, after six years, has proved to be a most realistic and effective method of teaching forest fire prevention in South Carolina.



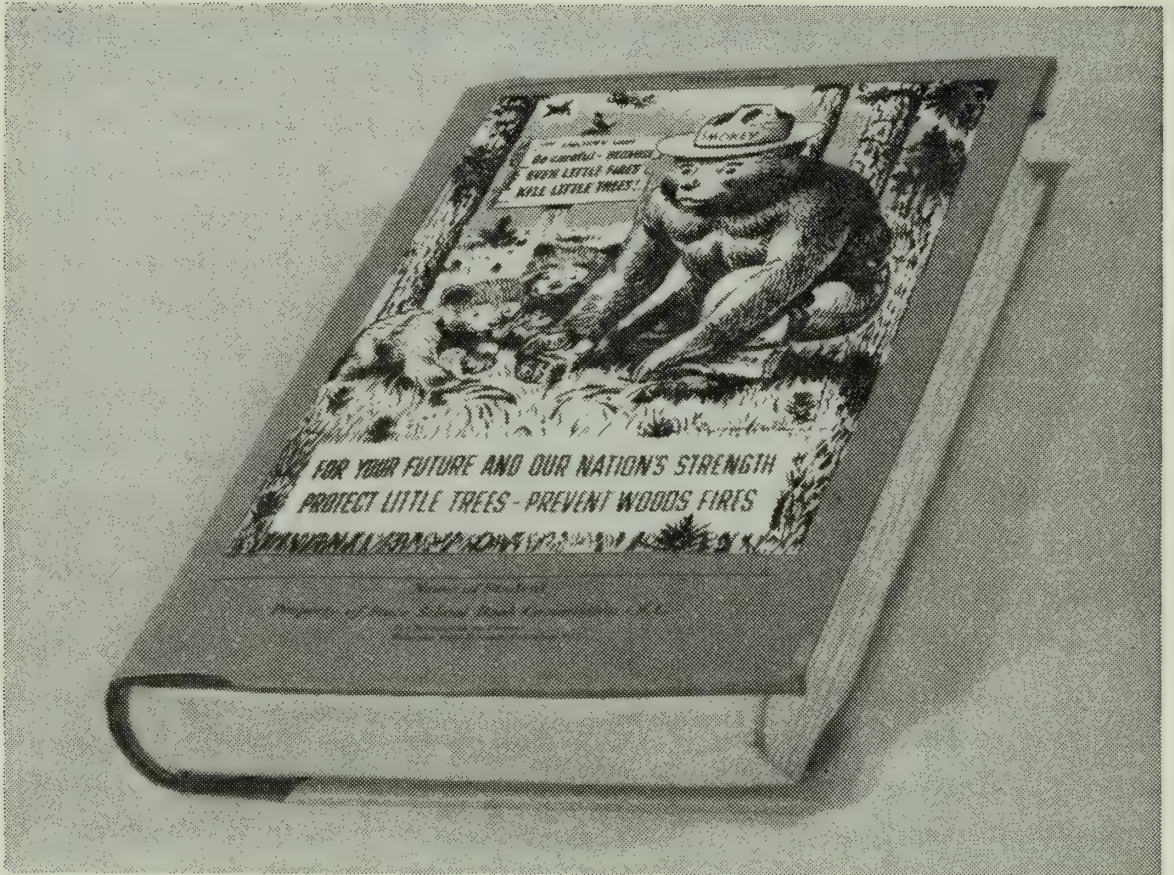
Commission personnel conduct an intensive forest fire prevention program in each county. On the premise that face to face contact with people is the best way to teach forest fire prevention, Commission rangers and wardens in all counties are equipped with personal teaching aids. One of these is a little pine tree embedded in a block of clear plastic approximately  $1\frac{1}{4}$  inches wide by  $4\frac{1}{2}$  inches long. In this way fire fighting personnel can carry little trees in their pocket and thus be ready to talk fire prevention at every opportunity. This device supports the point that "even little fires kill little trees." After such a discussion the ranger or warden may give the person a pocket calendar carrying a full color illustration of the hand behind the little tree and the message "For our Children's future and our nation's strength—lend nature a hand—protect little trees." The fishing guide on the back of the calendar provides added interest. This has proven to be a popular and effective forest fire prevention tool.

Another fire prevention "personal contact tool" distributed by rangers and other Commission personnel is match books with a forest fire prevention reminder.

Recognizing the need for public display of the idea expressed in the pocket calendar, the Commission utilizes wall calendars measuring 21 x 28 inches. The 1955 calendar carried a color photograph of the Commission's forest fire prevention symbol, a hand behind a little tree, and the message "Lend Nature a Hand. Protect Little Trees." The 1956 calendar featured a color reproduction of Smokey Bear art work prepared especially for the Commission to carry out the theme "Smokey Says: Be Careful—Because Even Little Fires Kill Little Trees—For Your Future, and Our Nation's Strength, Prevent Woods Fires, Protect Little Trees." These calendars are distributed by State Commission of Forestry personnel for display in stores, barber shops, and other public places.

During the year Commission personnel continued to make effective use of 35 mm slide projectors and color slides as visual aids in fire prevention and forestry education work. In addition to showing to family and other adult groups, educational programs were again conducted in school classrooms. At the conclusion of such a school program the ranger or warden would usually give the children a color photograph of the hand be-





A million and a quarter schoolbook covers bring school children all over South Carolina a message on forest fire prevention and conservation.

hind the little tree, a poster, or other forest fire prevention reminders.

In order to reach a broad segment of the public, a most important distribution was made through the cooperation of the State School Book Commission, which once again made it possible for the State Commission of Forestry to place a forest fire prevention message on the front panel of schoolbook covers. The art work featuring Smokey Bear which was used on the Commission's 1956 wall calendars and pocket calendars was printed on 1,249,230 schoolbook covers distributed to schools during 1955-56 to protect state-owned textbooks.

One of the most effective fire prevention approaches is a personal visit and individual demonstration to the landowner in his own woods, sometimes using by the simple technique of the ranger or warden laying out a 1/1,000 acre plot on the ground. After this known area is laid out the teacher parts the grass with his hands and allows the landowner to discover his own little trees provided by Nature. Usually several little trees are found on this sample plot, and that number multiplied by a



thousand equals the number per acre if the plot is a fairly representative sample of the area. When the landowner realizes that he has from one to several thousand little trees per acre hidden in the grass, adding at least \$10.00 per acre to the value of his land he has a dollars-and-cents reason for fire prevention. It has been the experience of Commission personnel that many landowners are surprised to learn of the existence of these little trees. Even experienced woodsmen have registered surprise and keen interest in such a demonstration.

Fire prevention efforts of Commission personnel in their day to day contacts with landowners in each county are often reinforced by other efforts embodying the Commission's little tree idea of forest fire prevention. For example, many forest industries and other organizations use a sketch of the hand behind the little tree or use the term "protect little trees," in their fire prevention or public service advertising efforts.

### **COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN**

For the fifth successive year the Commission's philosophy was used in the Cooperative Forest Fire Prevention Campaign. This national program, featuring Smokey Bear, is guided by The Advertising Council, Incorporated, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service, and is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the most outstanding public service campaigns of The Advertising Council, Inc.

In support of this national campaign a wide variety of materials featuring Smokey Bear are used in South Carolina.

Items such as posters, booklets, bookmarks, blotters, newspaper ads, radio platters, TV spot films and similar materials are used to bring fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flashlights, wallets and moccasins, T-shirts, scarfs, fish-





State Forester Chas. H. Flory welcomes "Smokey" to South Carolina. The Smokey outfit has been used in many school programs and parades during the year.

ing tackle and archery sets, cigarette snuffers and ashtrays, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, banks, coloring books, comic books, story books, bubble bath, buttons, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, and Smokey "Teddy" Bear dolls. A rather unusual incident dealing with one of the talking Smokey Bear dolls occurred in South Carolina, and attracted



attention throughout the country. The incident is described in the following article quoted from the June 1956 issue of *State Service Magazine*:

### SOUTH CAROLINA TALKING BEAR ATTRACTS NATIONWIDE ATTENTION

A talking bear from South Carolina attracted nationwide attention just before Christmas in a news story that appeared in newspapers throughout the country. The unusual talking bear also made an appearance on a network television program.

It all began when the S. C. State Commission of Forestry ordered a number of talking Smokey Bear teddy bears produced by a major toy manufacturer under special license as part of the nationwide Cooperative Forest Fire Prevention Campaign. This campaign, carried out by the U. S. Forest Service and the forestry departments of the various states, in cooperation with the Advertising Council, Inc., uses the familiar figure of Smokey the Bear as a symbol. Smokey's likeness appears on posters, booklets, television programs, in books, newspapers, and in other places, urging people to "Remember, Only *You* Can Prevent Forest Fires."

As part of this campaign, certain manufacturers are licensed to produce commercial Smokey Bear products that carry a forest fire prevention message. Furthermore, the manufacturers pay a royalty of 5% of the wholesale selling price, which goes into a fund to be used for further forest fire prevention efforts.

One of the commercial items is a stuffed toy bear, 17 inches tall, dressed in blue twill dungarees, a Forest Ranger's hat, and wearing a Junior Forest Ranger badge. Turning a handle on his back actuates a talking mechanism, with a tiny bear-like voice saying:

"I'm Smokey the Bear, I'm Smokey the Bear  
Running and looking for smoke in the air.  
I warn careless people, and ask them take care.  
Please prevent forest fires, says Smokey the Bear."

The S. C. State Commission of Forestry headquarters at Columbia placed orders for a number of bears to promote forest fire prevention efforts in South Carolina.





South Carolina Talking Bear attracts nationwide attention. (Photo courtesy THE STATE newspaper.)

All was well until one particular bear arrived. Instead of having the gruff, but friendly voice of Smokey the Bear reciting a forest fire prevention message, this bear had a tiny, child-like voice saying:



"Now I lay me down to sleep.  
I pray the Lord my soul to keep.  
God bless Mommie, God bless Daddy, Amen."

Evidently a mixup somewhere along the toy assembly line had placed a little girl doll talking mechanism in one of the bears.

Assistant State Forester Walter Ahearn wrote to Smokey Bear headquarters in Washington, and the Southern Regional office of the U. S. Forestry Service in Atlanta, outlining this development and pointing out that because of the slip at the factory, there probably would be a little girl somewhere in the United States who might be quite surprised and perhaps disappointed to find her new Christmas doll reciting a forest fire prevention message instead of saying its prayers.

A story about the little bear with the little girl's voice, filed by one of the press wire services, appeared in a number of newspapers throughout the country, and as a human interest item in a number of radio news programs. Officials of NBC-TV in New York saw the story and became interested in having the bear appear on a network television program. After an exchange of long distance telephone calls between New York, Columbia, and Washington the little bear was carried to the Columbia airport and was flown to New York City.

The net work television program on which the bear appeared gave the story of Smokey Bear as the symbol of forest fire prevention used by the U. S. Forest Service, state forestry services, and the Advertising Council, Inc. in the nationwide Cooperative Forest Fire Prevention Campaign. One of the regular talking Smokey Bear dolls was demonstrated, along with the South Carolina bear with the little girl's voice, and the story of the mix-up in voices was explained. The program made a nation-wide appeal to try to locate the little girl who might receive a doll with Smokey Bear's voice, advising that if she would get in touch with Smokey Bear Headquarters in Washington, D. C. she would be presented with a special Smokey Bear doll.

As of this writing the baby doll with Smokey Bear's voice has not been located, so forestry officials hope that every little girl who received a Christmas doll is happy, and that Smokey Bear's forest fire prevention efforts will continue without confusion.



## FOREST FIRE RECORD

The branch of Information and Education continued to keep the press and public informed accurately as to the forest fire situation throughout the state, stressing the need for particular care during the critical dry and windy months of January, February, March, and April. The Commission was active in trying to keep abreast of the demands made for information, articles and photographs for newspapers, and motion picture footage for television use.

The high occurrence and resulting damage from intentionally set fires during the year pointed up the urgent need for an intensified program of child and adult education as well as the need for a strengthened law enforcement program.

## SCHOOL PROGRAMS

Foresters, Rangers and Wardens of the Commission of Forestry conducted 1,157 programs in schools throughout the state bringing information on forestry to school children and teachers.



"Stop Woods Fires" strips were placed in every school bus in the state by rangers and wardens of the State Commission of Forestry.



The main effort is directed to holding a program in every fifth and sixth grade, and in every vocational agriculture class in each county. As a result of requests from teachers, programs are held in many other classes, too. In most of these programs, color slides are used to illustrate important points of instruction. Many of the slides used are of local scenes and local problems, creating local interest and educational value.

The broad aim of the Commission's school programs is to build a stronger and more appreciative community of the future by giving good instruction and information to our children as to the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

### FORESTRY DEMONSTRATIONS

During the year 4,224 persons attended 111 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations in general cover the field of forest fire protection, correct cutting methods, utilization of forest products, and reforestation.

Demonstrations are very effective in getting forestry information to people and can do much to help make it possible to grow an appreciably greater amount of valuable timber on the 12 million acres of forest land in the state.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson Extension Service, and other groups and organizations. Georgetown Timber Festival was held during the week of October 14 and 15, 1955. Sponsored by the Georgetown Chamber of Commerce, the festival constitutes an expression of appreciation by the people of Georgetown to the woodusing industry of the county and the good living realized from the sale of raw products from the woodlands of the county and the manufactured products from the mills. The activities of the festival included boat races, barbecues, a wood cutting contest, street and ballroom dances, crowning of a queen, and an impressive street parade. The Commission of Forestry participated in the Timber Festival by providing exhibits for stores, and a float for the parade.

## CONSERVATION WEEK AND ARBOR DAY

Many people, agencies and organizations cooperated to make the 1955 Conservation Week a real success. South Carolina law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, a special program sheet was printed and distributed to schools, churches, civic and patriotic organizations and other interested groups to assist them in planning programs and observances during Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

A total of 888 Conservation Week and Arbor Day programs were held, with 114,265 persons attending.

## FIRE PREVENTION ROADSIDE SIGNS

Maintenance of 450 roadside signs was carried out by rangers and wardens in every county of the state. The signs, erected in a series of three, carry the Keep South Carolina Green seal and messages in the following sequence: USE YOUR ASH TRAY—PREVENT WOODS FIRES—PROTECT LITTLE TREES.

The Commission has obtained basic coverage on the main highways over the state. It is hoped to be able to intensify this project from year to year by providing additional signs along highways where thousands of motorists will see these forest fire prevention reminders.

## MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment





Roadside signs with fire prevention messages dot every major highway in South Carolina. These signs were designed, purchased, and erected by the S. C. State Commission of Forestry.

is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 68,118 people saw motion pictures on forestry at 1,120 showings.

### **VOCATIONAL AGRICULTURAL SCHOOL FORESTRY PROGRAM**

An excellent means of getting forestry information to many people is through the school forestry program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. This cooperative program has been carried on yearly since 1930,

when forestry was added as a course of study in vocational agriculture classes in South Carolina.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes. District Foresters and Rangers are available to assist vocational agriculture classes with talks, demonstrations, and field work on forestry, and also provide filmstrips, motion picture films, booklets, posters, and other aids for teaching forestry.

The Forestry Commission sponsors an annual FFA Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1955-56 school year awards were presented to the winning FFA Chapters in each Vocational Agriculture District as follows:

District I—

- (1) Cleveland FFA Chapter
- (2) Mauldin FFA Chapter

District II—

- (1) Fort Mill FFA Chapter

District III—

- (1) Gilbert FFA Chapter
- (2) Edgefield FFA Chapter



## District IV—

- (1) Berkeley FFA Chapter
- (2) Walterboro FFA Chapter

Plaques and prize money were awarded to the winning FFA Chapters at the State FFA Convention.

For the 1955-56 school year prizes were offered to the winning Negro Vocational Agriculture Chapters, and the following NFA Chapters won awards for their chapter forestry work:

## District II—

- (1) Florence Chapel NFA Chapter

## District IV—

- (1) Jasper County Training School NFA Chapter
- (2) Voorhees NFA Chapter

### RESOURCE-USE EDUCATION

Commission personnel participated in a number of workshops for teachers during the year to stimulate the teaching of conservation at various grade levels in the schools of the state. Resource-use education workshops were held at the University of South Carolina, and at Clemson College during the year in which Commission personnel assisted with instruction in forestry, and the use of State Park facilities.

In addition to the workshops mentioned above, forestry and State Park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation.

The Resource-Use Education movement has stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the State Parks for this purpose. It has been demonstrated that using these facilities and camping on school time creates a very effective situation.

The State Commission of Forestry welcomes this instructional use of State Parks, and Commission personnel cooperated with several groups during the year to develop worthwhile projects in day camping and school camping at the State Parks.

## TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and State Parks before many groups. The quality of talks improved considerably during the year due to training, and the use of color slides with the talks undoubtedly made the talks much more interesting and more effective.

During the year a total of 801 talks were made by Commission personnel to 18,056 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and State Park matters to South Carolinians. Foresters, Park Superintendents, Rangers, Wardens, Tractor Operators, Tower Operators, and other Commission personnel play an important part in the Commission's information and education program. As one example of the number of people reached, during the past year 21,190 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting, and preventing fires was usually explained or demonstrated.

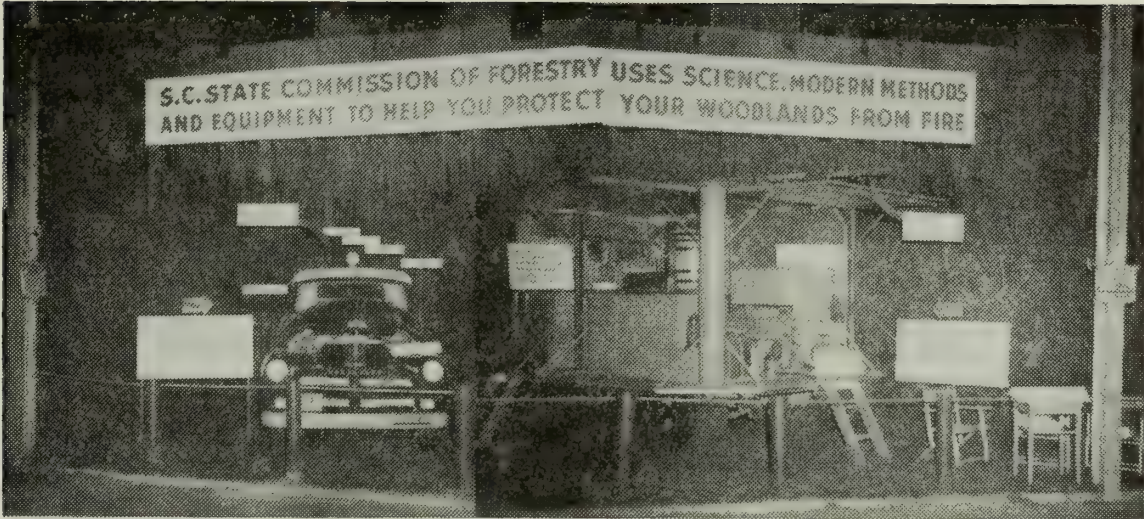
## EXHIBITS

The Forestry Commission welcomed the many requests by county fair organizations, garden clubs, church, school, and other groups for educational forestry and state park exhibits because they provided an excellent opportunity for placing forestry and State Park information before the people.

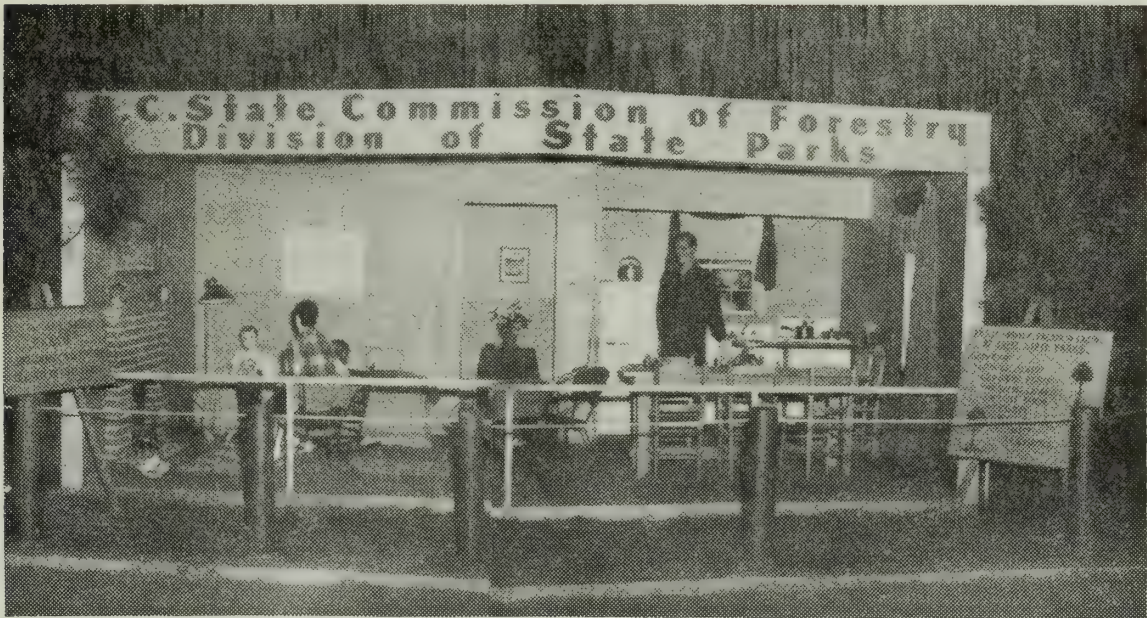
The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits where practicable in an effort to attract the attention of people attending fairs and special gatherings.

Until the past several years an exhibit was rarely requested except for state and county fairs. During this year, garden clubs and other groups requested exhibits regularly throughout the year. This is an indication of interest in forestry and State Park activities by various groups of people.





Forest fire control equipment and a Mobile Forest Fire Control Headquarters which can be used as an emergency control point on bad forest fires or as a communications station during floods or other public emergencies.



A typical State Park cabin interior attracted the attention of many visitors at the 1955 State Fair.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and State Park information through personal contacts by Commission personnel on duty and through the distribution of literature.

Exhibits were installed by Commission personnel at 56 locations and were seen by an estimated 962,237 persons.

The following is a record of where forestry and State Park exhibits were displayed:



Location of Exhibit—County Fairs	Type of Exhibit	Estimated Attendance
Rock Hill (York)	Talking Smokey	50,000
Kingstree (Williamsburg)	Plant and Protect	4,500
Bennettsville (Marlboro)	Little Tree Exhibit	3,500
Greenville	F. C. Section—1953 State Fair Exhibit	41,000
Manning (Clarendon)	Plant and Protect	2,220
Manning (Clarendon) (N)	Plant and Protect	3,000
Anderson	Talking Smokey	85,000
McCormick	It Takes Men to Fight Fire	3,840
Greenwood	F. C. Section—1953 State Fair Exhibit	38,000
Camden (Kershaw)	Thinking Behind Fire Prevention in S. C.	12,000
Union	Talking Smokey	30,000
Chesterfield	Thinking Behind Fire Prevention in S. C.	5,000
Newberry	F. C. Section—1953 State Fair Exhibit	25,000
Chester	Talking Smokey	20,000
Sumter	Gum X-Section	30,000
Laurens	Talking Smokey	32,000
Bishopville (Lee)	Little Tree Exhibit	10,000
Bishopville (Lee) (N)	Little Tree Exhibit	7,000
Easley (Pickens)	F. C. Section—1953 State Fair Exhibit	6,000
Kershaw (N)	Thinking Behind Fire Prevention in S. C.	7,000
Sumter (N)	Automatic Slide Projector	15,000
Marion	Gum X-Section	22,000
Walterboro (Colleton)	Talking Smokey	5,000
Moncks Corner (Berkeley)	Management Section—1953 State Fair Exhibit	4,500
Anderson (N)	It Takes Men to Fight Fire	15,000
Florence	Mobile Radio Headquarters	75,000
Lancaster	F. C. Section—1953 State Fair Exhibit	10,000
Chester (N)	Automatic Slide Projector	3,000
Loris (Horry)	Gum X-Section	7,500
Charleston	Management Section—1953 State Fair Exhibit	30,000
Lancaster (N)	F. C. Section—1953 State Fair Exhibit	5,000
Charleston (N)	Management Section—1953 State Fair Exhibit	10,000
Total		617,060
<b>State Fairs</b>		
Columbia	Mobile Radio Headquarters	200,000
Columbia (N)	Thinking Behind Fire Prevention in S. C.	80,000
Total		280,000

#### EXHIBITS, FLOATS, AND DISPLAYS FOR SPECIAL EVENTS (Other than County or State Fairs)

Camden (DuPont May Plant)—Common Woods of South Carolina	2,000
Camden (Camden Garden Club)—Murals and Talking Smokey	2,000
Sumter (Shaw Air Force Base)—Selected Murals	15,000
Sumter (Sumter Garden Club)—Forest Farmer Exhibit	2,000
Sumter (National Bank of S. C.)—Selected Murals and Little Tree Exhibit	3,000
Columbia (U. S. O.)—Smokey Suit	150
Columbia (Epworth Orphanage)—Smokey Suit	100
Columbia (Fire Prevention Parade)—Smokey Suit	5,000
Conway (Electric Fair)—Selected Murals	4,000
Georgetown (Timber Festival)—Three Exhibits and Float	7,500
Kingstree (Garden Club)—Selected Murals	500
Swansea (Garden Club)—Reforestation	550
Bamberg (Garden Club)—Thinning	400
Aiken (Halloween Carnival)—Talking Smokey	800
Barnwell (Parade)—Fire Fighting Equipment	2,000
Barnwell (Garden Club)—Common Woods of S. C.	550
Blackville (Garden Club)—Common Woods of S. C.	750
Rock Hill (Children's Nature Museum)—Common Woods of S. C.	15,000
St. George (Christmas Parade)—Fire Prevention Float	2,800
Columbia (State Parks Advisory Committee)—Photo display of Park Improvements	12
Columbia (State Advisory Committee of Forestry Boards)—Selected Exhibits	65
Charlotte, N. C. (Carolina Lumber & Builders Supply Ass'n)—Common Woods of South Carolina	1,000
Total	65,177
Grand Total	962,237



## RADIO AND TELEVISION

Radio and television are valuable for getting forestry and State Park information to large numbers of people.

Radio stations in South Carolina generously cooperated with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, as well as information on State Park facilities.

Several districts have regularly scheduled programs on various radio stations. All districts have used radio to some extent. Many rangers use local radio stations to give warnings of periods of high fire danger, to give tips on how to prevent fires, and to present other information on forestry. Records show a total of 291 radio programs on State Parks and forestry were presented during the year, in addition to recorded spot announcements and recorded 15-minute radio programs made available through the Cooperative Forest Fire Prevention Campaign.

During the year many radio stations broadcast the 13-week series of 15-minute programs produced as part of the nationwide Cooperative Forest Fire Prevention Campaign. These programs, featuring Jelly Elliott and the Three Knotheads; and Billy Johnson, The Singing Woodsman, and the Sons of the Pioneers have been very popular in South Carolina, and several stations have repeated the series. These programs combine hillbilly, western and folk music with stories and messages on forest fire prevention and on other phases of forestry. In addition, many radio stations used platters containing short forest fire prevention messages which were produced as part of the CFFPC program.

Commission personnel appeared on eight television programs, and provided films, slides, and other materials on State Parks and forestry for TV use. Motion picture film trailers featuring Smokey Bear were distributed to all TV stations in the state, and were widely used.

The Commission of Forestry plans to continue using radio and television facilities to help do the job of informing and educating in the fields of forestry and State Parks in South Carolina.

## TRAINING

Every employee of the Forestry Commission has an important part in doing the information and education job. Because the Forestry Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective, talks and slide lectures in all phases of our work are more interesting and more effective. Fire control training stressed the fact that the forest fire prevention program and an expanded forest management program depend on the effectiveness of the selling job done by each member of the organization in its respective community.

State Park personnel are continually aware that in order to serve the public and to promote an understanding and appreciation of the State Parks program and its objectives, a continuing job of informing and educating park users is necessary. A part of the State Park Superintendents training meeting held each year is devoted to discussions and instruction in public relations and information and education activities to enable the State Park program to better serve the three million visitors who use State Park facilities each year.

## NEWS RELEASES AND ARTICLES

Newspapers and magazines accepted and used much material prepared by personnel of the Commission on forestry and State Parks. There is constant effort to furnish better quality photographs and written material for the editors. The material is also more acceptable to the readers because it is more readable and more interesting.

During the year Commission personnel prepared 776 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during fire situations, news items would be given orally to individual papers and to the wire services.

In addition to news releases, several feature articles on various phases of State Parks and forestry were prepared. Pictures or prepared mats illustrating the story were usually sent with the feature.

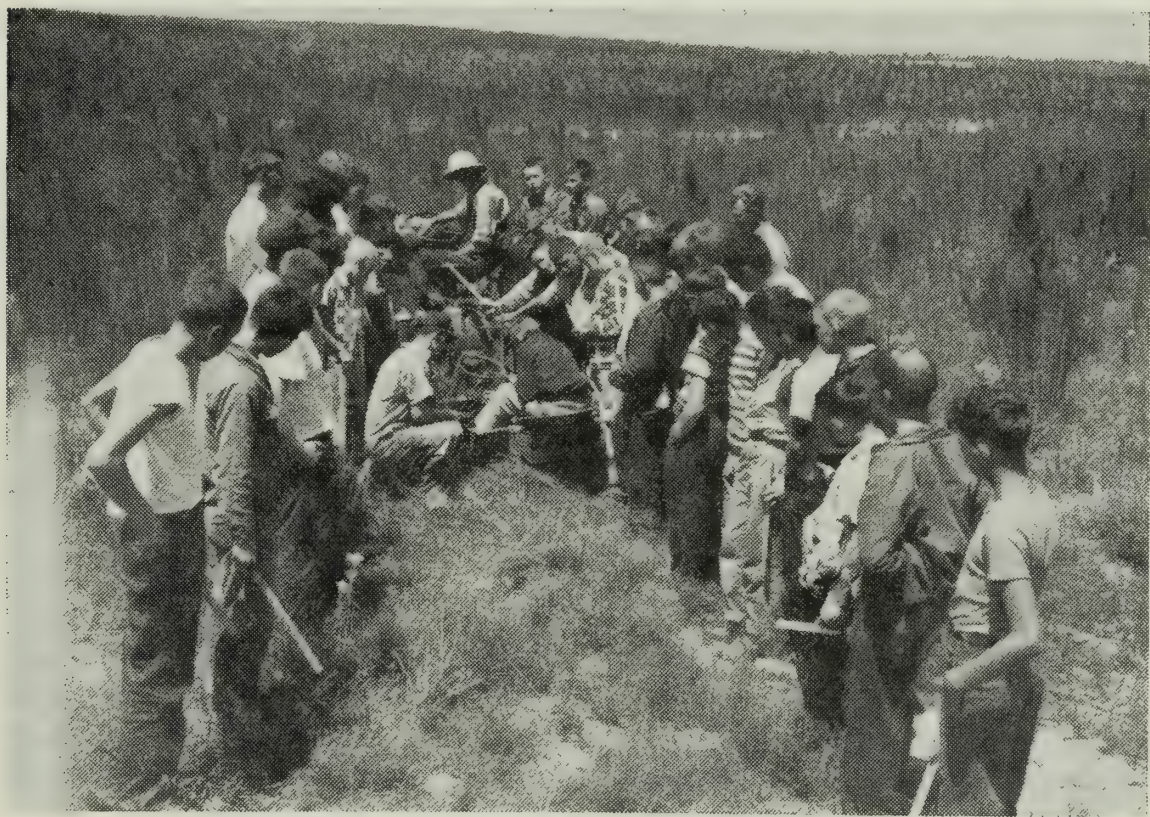


During the year a number of special articles were prepared for magazines and other special publications to provide State Park and forestry information to general and special audiences.

Forestry Commission personnel in every county of the state prepared news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors. The excellent press coverage has helped place forestry and State Park news before the people more prominently than ever before.

### BOYS' FORESTRY CAMP

The ninth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 1-6. Eighty-five young men representing every county in the state attended the week-long camp. This was the largest number of boys to attend camp in its nine-year history. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject "Why I Would Like to Attend Boys' Forestry Camp." On invitation of the Commission, 20 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activi-



Boys at the Commission's ninth annual Forestry Camp watch the operation of a mechanical tree planter on the Sand Hills State Forest.



ties in FFA chapters in the state. In the same manner 20 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and fun characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planning techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by State Parks.

## PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out the forestry and State Park information program. One important function of printed materials is to provide detailed information to those who request forestry and State Park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies, and other organizations, groups, and agencies who published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. In this way forestry and State Park information is given widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

During the year the following publications and printed materials were used by the State Commission of Forestry:

South Carolina State Parks Welcome You—folder

State Park Vacation Cabins—folder

Progress Report, \$300,000 Bond Issue for Capital Improvements of State Park Facilities as of Jan. 15, 1955—folder

Forest Insects and Diseases of South Carolina Trees—booklet published jointly by S. C. State Commission of Forestry and Clemson College Extension Service.



1955 Conservation Week and Arbor Day Program Suggestions  
Report of the State Commission of Forestry for the year July  
1, 1954 to June 30, 1955

Little Fires Do Big Damage—reprint of published article  
Forest Resources of South Carolina—reprint of published  
article

Lend Nature a Hand—Protect Little Trees—wall calendar.

Lend Nature a Hand—Protect Little Trees—photo reprint

For Our Children's Future and Our Nation's Strength, Lend  
Nature a Hand, Protect Little Trees—pocket calendar

Smokey Bear Vacation Reading Club—certificate

Smokey Bear Vacation Reading Club—membership card

Our Children's Future—Protect Little Trees—printed book  
match covers

For Your Future and Our Nation's Strength, Protect Little  
Trees, Prevent Woods Fires—art work and message on  
state schoolbook covers in cooperation with State School  
Book Commission.

### **SIGN AND WOODWORKING SHOP**

The Commission's sign and woodworking shop continued to produce routed letter signs, picnic chairs and tables, fair exhibits, and other necessary cabinet and carpentry work. The distinctive routed letter signs identified the various forestry and State Park installations with the Commission of Forestry. The Commission's fair exhibits constructed in the shop helped to bring forestry and State Park information to many people during the year.

### **SOUTH CAROLINA TREE FARM SYSTEM**

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must have demonstrated both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must

apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. His neighbors and people passing by will see the sign and the good forestry practices and come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. The members of the S. C. Tree Farm Committee are:

*Chairman—*

Vern Cutler, Argent Lumber Company, Hardeeville

*Members—*

Joe Youorski, Champion Paper and Fibre Company, Newberry

Harvey Rhettberg, Poinsett Lumber and Mfg. Co., Pickens

H. F. Lathrop, Lightsey Brothers, Miley

H. F. Bishop, Consulting Forester, Marion

C. P. Key, Lodge

T. M. Folger, Taylor-Colquitt Company, Spartanburg

Charles H. Flory, State Forester, Columbia

George B. Nutt, Clemson Agricultural College, Clemson

Assistant State Forester W. T. Ahearn serves as Secretary to the State Tree Farm Committee.

As of June 30, 1956, there were 181 Tree Farms in the State comprising 1,310,286 acres.

Names of landowners certified during the past year are marked with an asterisk on the following list of South Carolina Tree Farmers:



## SOUTH CAROLINA TREE FARMERS

Name—Address	Certified Tree Farm Acreage
Mrs. Walter C. White, Statesburg	5,500
McBride Dabbs, Mayesville	2,960
J. T. Johnson, Lynchburg	100
C. M. Leonard, Camden	5,500
D. G. Lesslie, White Oak Farm, Rt. 2, Rock Hill	205
Corey P. Key, Lodge	1,220
M. P. Howell, Jr., Route 1, Ruffin	2,400
Poinsett Lumber & Manufacturing Co., Pickens	64,000
C. E. Bullard, Early Branch	180
Wade C. Harrison, Rt. 2, Troy	3,400
W. D. Summer, Rt. 2, Newberry	70
J. C. Rich, Islandton	250
Dr. C. L. Stevens, Campobello	163
Frank E. Timmerman, Edgefield	400
Joe L. Tolbert, Ninety Six	4,050
Pegues Family, RFD, Bennettsville	1,700
F. E. Coxe, Rt. 2, Bennettsville	1,300
Mrs. H. L. Tilghman, Marion	15,000
A. H. Rogers & Sons, Society Hill	550
Benton D. Dargan, Rt. 3, Darlington	1,000
S. B. Huff, Rt. 2, Piedmont	75
G. L. Williamson, Rt. 1, Florence	800
Mrs. H. B. McCall, Effingham	1,000
Koppers Co., Inc., Wood Preserving Div., Charleston	9,474
E. B. Hare, Star Route, Westminster	60
Dixie Clay Co., Bath	1,912
Southern Railway (Lincoln Green Forest), Dorchester	12,832
John Tatum, Bamberg	300
J. F. Meares, Rt. 1, Nichols	200
H. N. Cousar, Rt. 1, Latta	500
Landon Thomas, 2226 Pickens Rd., Augusta, Ga.	515
J. R. Hawkins, Lykesland	110
Mrs. S. B. McMaster, 1900 Heyward St., Columbia 5	2,900
Mr. and Mrs. E. M. Harris, Bennettsville	275
S. J. Chandler, Minturn	400
J. B. Heins, Blythewood	85
J. Lamar Brantley, Mgr., Good Hope Corporation, Ridgeland	12,000

Name—Address	Certified Tree Farm Acreage
International Paper Co., Southern Kraft Div., George- town .....	273,398
Mrs. E. M. and McIver Williamson, Mont Claire .....	1,225
H. N. Slater (The Pine Tree Timber Co.), Ridgeland .....	8,322
George Roberts, Pineland .....	50
Oscar Wigington, Salem .....	2,940
Union Bag & Paper Corp., Savannah, Ga. ....	54,757
Fairfield Forest Products Co., Newberry .....	110,256
J. H. A. Carter, Lodge .....	200
Niles C. Clark, Waterloo .....	665
S. W. Mims, Route 1, Harleyville .....	1,600
A. W. Murray, 2203 Johnston St., Newberry .....	4,684
E. F. Conger, Box 149, Staunton, Va. ....	6,435
West Virginia Pulp & Paper Company, Georgetown .....	382,809
Ferdinand Gregorie, Mt. Pleasant .....	525
F. W. Atkinson, Rt. 4, Augusta, Ga. ....	155
Duke Power Company, Charlotte 1, N. C. ....	61,500
R. C. Kinard, Islandton .....	1,155
Homer Saunders, Rt. 3, Walterboro .....	3,500
E. Heyward Benton, Rt. 4, Walterboro .....	75
E. D. Kinard, Islandton, S. C. ....	268
M. W. Wise, Elko .....	187
L. W. Anderson, Box 432, Williston .....	860
Graniteville Company, Graniteville .....	15,550
O. L. Warr, Rt. 2, Timmonsville .....	200
E. V. Golding, Waterloo .....	135
J. T. Squires, Rt. 3, Latta .....	285
D. H. Sullivan, Box 115, Lexington .....	149
Gair Woodlands Corps., Savannah, Ga. ....	53,832
C. A. Harper, Estill .....	4,000
Bruce Harter, Fairfax .....	450
Dunbar Oswald, Rt. 2, Allendale .....	700
Guy V. Whitener, College St. Extension, Newberry .....	1,847
Ben Alderman, Alcolu .....	1,680
G. T. Floyd, Manning .....	445
G. M. Bagnal, Rt. 3, Manning .....	40
M. Earl Stone, Rt. 1, Saluda .....	194
F. M. and M. S. Dwight, Eastover .....	144
Olin J. Kinsler, Rt. 1, Columbia .....	205



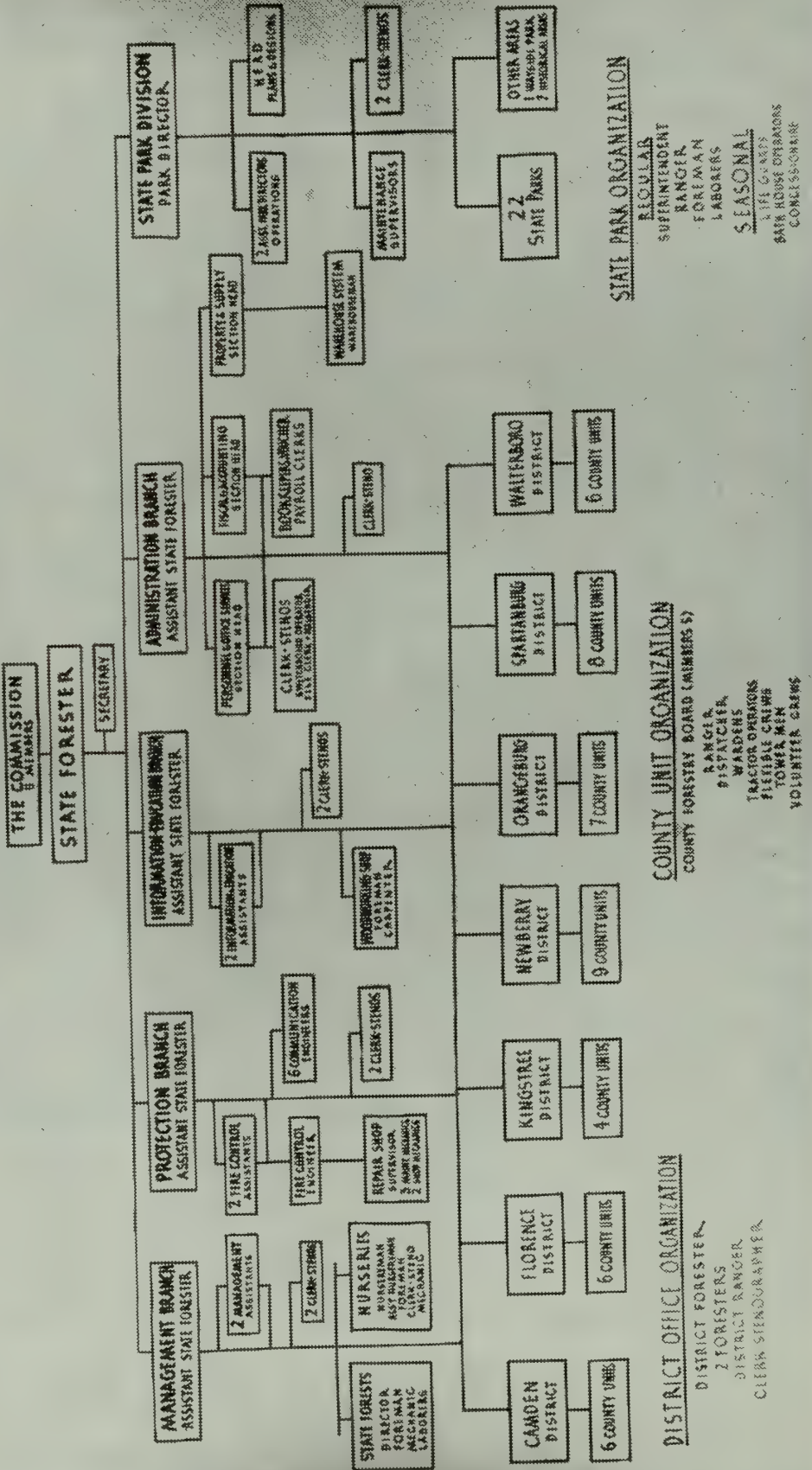
Name—Address	Certified Tree Farm Acreage
A. J. Lever, Rt. 1, Columbia	112
J. D. Peeples, Early Branch	308
Kendall Mills—Wateree Div., Camden	450
James L. Sweet, Boykin	600
H. Gates Lloyd, Haverford, Pa. & Richard W. Lloyd, 1707 Lyttleton St., Camden	2,854
R. W. Lloyd, 1707 Lyttleton St., Camden	1,370
Cypress Woods Corp., Ridgeland	20,000
Brooks B. Weber, Rt. 5, Union	800
Holliday Brothers, Galivants Ferry	2,000
W. H. Manning, Jr., Barnwell	549
Tuomey Hospital, Sumter	1,900
Mrs. E. R. Mobley, 607 Edisto St., Johnston	1,000
George Patrick, Bowman	700
Anthony Fogle, Neeses	140
Union Memorial Presbyterian Church, Rt. 1, Winns- boro	425
Thomas W. Timms, Rt. 1, Box 60, Winnsboro	400
Cragmoor Farms, Moore	1,100
J. P. Brunson, Sr., Darlington	468
Eastover School, Eastover	5
William H. Wicker, Univ. of Tennessee, Knoxville, Tenn.	586
P. T. Harris, Silverstreet	200
William E. Senn, Newberry	135
G. B. Reagin Est., Rt. 4, Newberry	250
Dr. J. E. Grant, 1817 Lindsey St., Newberry	197
E. Guy Foster, McConnells	400
Charlton DuRant, Manning	229
E. E. Dargan, Conway	160
J. Porter Gaston, Richburg	155
J. T. Clinkscales, Rt. 1, Abbeville	370
Charles B. Abell, Lowrys	440
Dr. Stanley C. Baker, Greenwood	100
Misses. Nora and Mae Davis, Troy	181
W. R. Cothran Estate, 312 Grace St., Greenwood	490
J. Hearst Coleman, 248 Jennings Ave., Greenwood	400
Frank J. Wideman, 1366 National Press Bldg., Wash- ington, D. C.	273

Name—Address	Certified Tree Farm Acreage
C. Cooper Sanders, Jr., and Howard P. Mabry, Greenwood .....	106
David Dows, Bradley .....	1,100
Henry G. Ligon, Rt. 2, Easley .....	24
J. B. Guess, Jr., Denmark .....	1,000
W. W. Woolsey, Montmorenci .....	500
Samuel H. Swint, Graniteville Company, Graniteville .....	327
Mrs. Margaret H. Lloyd, Camden .....	800
Mrs. V. T. Chastain, Box 897, Hampton .....	317
Willie Reed Bishop, Rt. 4, Walterboro .....	100
R. C. DeLoach, Furman .....	405
Mrs. Annie M. Pickney, 1006 Henderson St., Columbia .....	250
C. J. Cate, Jr., 129 S. Waccamaw, Columbia .....	455
John C. Billingsley, 924 Fair St., Newberry .....	111
J. Roy Cunningham, Rt. 6, Lancaster .....	300
Clyde D. Ware, Rt. 2, Iva .....	48
H. F. Bishop and C. H. Schaeffer, 316 Woodland Dr., Marion .....	43
Vance Perritt, Mullins .....	60
F. C. Edge, Mixonville .....	95
A. D. Strickland, Rt. 3, Loris .....	100
H. L. Bellamy, Wampee .....	25
J. M. Huber Corp., Langley .....	1,854
J. Ansel Caughman, Rt. 2, Leesville .....	1,200
G. E. King, McBee .....	950
R. D. King, McBee .....	270
Marlin H. Bruner and W. C. Nettles, Clemson .....	415
Marlin H. Bruner, Clemson .....	104
A. C. Flora, 1511 Haygood Ave., Columbia .....	204
St. Clair Davis, Marion .....	250
Frank H. Covington, 311 Fayetteville Ave., Bennettsville .....	100
Helen S. Tiencken, 4009 Fessenden St., N.W., Washington 16, D. C. ....	297
Stewart C. Hope, Agent, 3350 Millwood, Box 5054, Columbia .....	505
Dr. R. N. Kennedy, 15 E. Jones Street, Savannah, Ga. ....	264
Mrs. Sarah Goggans, Newberry .....	562
T. C. Jeter, 252 Sims Ave., Columbia .....	108



Name—Address	Certified Tree Farm Acreage
Dr. W. G. Gamble, Jr., 2010 Fifth Avenue, Bay City, Michigan .....	842
J. L. Mason, Clarks Hill .....	1,211
Atlantic Coast Line RR Co., Wilmington, N. C. ....	376
W. H. Bradford, Rt. 4, Sumter .....	200
*H. H. Hentz & Son, Box 181, Newberry .....	8,056
*Hampton & Branchville RR Co., Inc., Hampton .....	4,902
*Edward Duckworth, 1126 Douglas St., Newberry .....	44
*Horace T. Oxner, Rt. 2, Saluda .....	107
*Vance & Dwiggins Co., Newberry .....	783
*Argent Lumber Co., Hardeeville .....	5,888
*J. T. Strathan Co., Port Wentworth, Ga. ....	1,655
*Lightsey Bros. Lbr. Co., Miley .....	39,584
*Dr. and Mrs. Carnes Weeks, Mt. Holly .....	6,410
*Hubert Boyd, Clinton .....	873
*J. B. Frazier, Jr., and J. B. Frazier, III, Winnsboro .....	669
*T. B. Amis, Box 71, Newberry .....	650
*Mrs. T. A. Black, Sr., Rt. 2, Box 2, Ruffin .....	1,131
*Bess Caldwell Bursinger, 2006 Luther St., Newberry .....	506
*Albert G. McCaughrin, 1208 Calhoun St., Newberry .....	38
*B. Hardin Keitt, 200 Hassel Place, Charlotte 7, N. C. ....	874
*J. Peter Grace, Jr., 7 Hanover Square, New York, N. Y. ...	12,700
*R. L. Fairey, Jr., Rowesville .....	121
*Dr. M. D. Farrar, 129 Folger St., Clemson .....	103
*Thomas D. and Christine M. Hinkle, Sunset .....	225
*Stiles M. Harper, Estill .....	2,654
*Guy V. Whitener, Jr., E. Wells Park Drive, Newberry ....	389
*Luke Winchester, Sunset .....	2,846
*J. B. Frazier, III, Winnsboro .....	180
*Dr. G. W. Cunningham, Laurens .....	114
*G. S. Carter, Jr., Heriot St., Charleston 31 .....	1,183
*Floride M. and William Glover, Willowbank, George- town .....	70
*Atlantic Creosoting Co., Inc., 17 Battery Place, New York 4, N. Y. ....	3,144
*Vestal Lbr. & Mfg. Co., Knoxville, Tenn. ....	5,472
*W. W. Smith, Andrews .....	4,482

# SOUTH CAROLINA STATE COMMISSION OF FORESTRY ORGANIZATION CHART





## ADMINISTRATION

The Commission's Administrative Branch is responsible for coordinating the activities of both central and field offices on fiscal and accounting, property and supply, and personnel and office services for both Divisions of the Commission—Forestry and State Parks.

### Personnel Accident and Injury

During the year 51 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

### Automotive Accidents

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately  $2\frac{3}{4}$  million miles and were involved in only seven minor accidents. Of the seven accidents which occurred, only two were classified as being preventable by the operator. It is believed this outstanding safe driving record resulted from the continued emphasis placed on the careful operation of motor vehicles on Commission business, through specific training and the assistance of the National Safety Council.

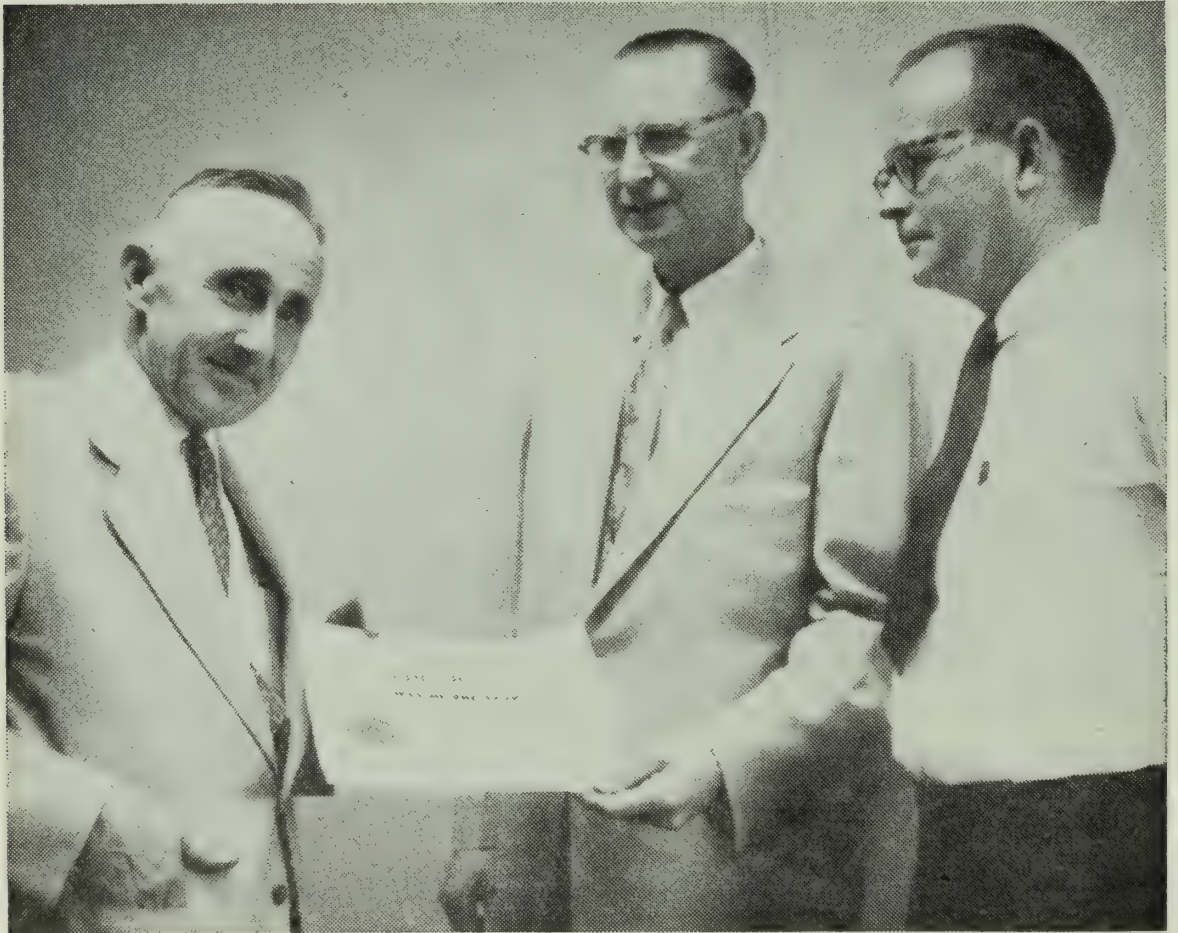
The Commission instigated a safe driving program sponsored by the National Safety Council several years ago. One of the rules of the Council requests each driver to operate a vehicle on official business for twelve consecutive months without a preventable accident before entitled to the first year safe driving award. If a preventable accident occurs during the first three years or before the third year award has been received, the driver's safe driving record is canceled and he is requested to begin again. Should a preventable accident occur after the third year award is received, such driver is penalized and is requested to operate for twelve additional months from date of accident before entitled to the next year award.

A review of the Commission's employees safe driving records indicates that 75 of the 324 drivers have operated commission or privately owned vehicles on official business for a period of one to three years without an accident; 72 for four to seven years; 103 for eight to 11 years; 38 for 12 to 15 years; 28 for 16 to 19 years; and four for more than 20 years.

### **Commission Purchasing**

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and fiscal procedure. A total of 1,342 requisitions were received and 1,342 purchase orders issued during the year.

Visual inventories were made during the year of all equipment in use by both the Divisions of Forestry and State Parks. Nec-



State Forester Chas. H. Flory was selected "Man of the Year in Service to South Carolina Agriculture in 1955" by the PROGRESSIVE FARMER magazine. Mr. Flory, left, accepts the award from Wm. C. LaRue, Associate Editor of PROGRESSIVE FARMER Magazine, center, and T. W. Morgan, Assistant Director of the Clemson College Extension Service, right.



essary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,398,600. In addition, the Commission has real property and improvements now estimated to be worth \$12,812,245.

### Personnel

Personnel employed by the Commission continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Twelve percent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist land-owners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

### PERSONNEL LOSSES

#### Division of Forestry

#### Resignations—1955-56

Asst. State Forester—I & E .....	1
Fire Control Assistant .....	1
Foresters .....	1
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Technical .....	3
Clerk-Stenographers (Columbia) .....	2
Clerk-Stenographers (Districts) .....	2
District Radio Technicians .....	2
District Rangers .....	2
Wardens .....	14
Towermen .....	10
Tractor Operators .....	12
County Clerks .....	1
<hr/>	
Non-technical .....	45
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Total resignations .....	48

**Losses due to promotions or change in positions**

Information and Education Asst. ....	1
District Forester .....	1
Foresters .....	1
	—
Technical .....	3
District Rangers .....	1
Rangers .....	2
Wardens .....	3
Towermen .....	1
Tractor Operators .....	2
	—
Non-technical .....	9
	—
Total .....	12
	—
Total Losses, Division of Forestry .....	60

**Division of State Parks****Resignations—1955-56**

Head, Plans and Designs .....	1
Superintendents .....	3
Ranger .....	1
Foremen .....	2
Laborers .....	6
Asst. Maintenance Mechanic .....	2
Clerk-Stenographer .....	1
	—
	16

**Losses due to promotion or change in position**

Maintenance Mechanic .....	1
Laborer .....	1
	—
	2
	—
Total Losses, Division of State Parks .....	18
	—
GRAND TOTAL—Personnel Losses .....	78



### Training

The Commission of Forestry strives at all times to improve each and every activity through constant personnel training and supervision. A series of individual on-the-job training sessions were conducted in each district office which proved highly successful and resulted in improved performance in all phases of administrative work. Subjects covered included budget preparation and fiscal control, property accountability, personnel records, leave, retirement and insurance, office administration and procedures.



Group training and individual training is carried out to improve efficiency and performance of S. C. State Commission of Forestry activities in forestry and state parks work.





## APPENDIX

## FINANCIAL STATEMENT

## SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1955-June 30, 1956

## RECEIPTS

## Division of Forestry:

Balance from 1954-55—Radio Comm. Fund	\$ 18,780.90	
State Appropriation—Operating	1,136,277.55	
Federal Funds — Protection C-M Law, Sec. 2	271,395.00	
Federal Funds—Reforestation C-M Law, Sec. 4 & N-D	10,500.00	
Federal Funds—Cooperative Farm Man- agement	17,000.00	
Federal Funds—12 Mile Creek (Pickens) Watershed	11,653.21	
Federal Funds—Civil Defense for Radio Equipment	16,500.00	
Manchester Forest—Special	1,500.00	
Counties and Timber Firms	12,833.11	
Miscellaneous Receipts	2,934.84	
Nursery	78,289.30	
State Forests	55,308.73	
Marking and Tallying Timber	7,643.06	
Radio Communication Project	14,848.44	
		<hr/>
Total Receipts—Forestry		\$ 1,655,464.14
Less Receipts Deposited to Cr. State Revenue Account		141,241.93
		<hr/>
Total Receipts Available for Expenditure		\$ 1,514,222.21
Total Expenditures		1,503,177.47
		<hr/>
Balance—Division of Forestry		\$ 11,044.74*

## Division of State Parks:

Balance from 1954-55 Hunting Island De- posits	\$ 2,401.52
Balance from 1954-55 Myrtle Beach Fish- ing Pier	1,612.94
Balance from 1954-55 Greenwood Park	4,997.65
Balance from 1954-55 Parks Improvements	28,897.91
Balance from 1954-55—Parks Notes & In- terest	4,018.19

Appro. 1951-52—Earmarked for Colored Park .....	49,950.00
State Appropriation—Operating .....	336,611.00
State Appropriation—Historical Areas .....	3,274.00
Forests & Parks Fund—Hunting Island Deposits .....	4,558.96
Myrtle Beach Fishing Pier .....	36,342.99
Greenwood Park .....	400.00
Cabin Rentals .....	25,762.02
Concession Stands .....	4,410.42
Bathhouse Receipts .....	41,140.28
Boat Rentals .....	3,020.15
Group Camps .....	11,235.62
Picnic Shelters & Recreation Bldgs. ....	4,547.36
Timber Sales .....	2,808.11
Hunting Island Grill .....	1,200.00
Miscellaneous Receipts .....	496.19

Total Receipts — Parks — Available for Expenditure .....	\$ 567,685.31
Total Expenditures .....	457,196.32
Balance—Division of State Parks .....	\$ 110,488.99†

## EXPENDITURES

Administrative & Technical .....	\$ 379,485.81
State Forest Nursery .....	90,428.71
State Forest Projects .....	55,910.85
Fire Protection .....	977,352.10

Total—Division of Forestry .....	\$ 1,503,177.47
Total—Division of State Parks .....	457,196.32
Grand Total—Expenditures .....	\$ 1,960,373.79

## RECAPITULATION

## Funds Available:

Division of Forestry .....	\$ 1,514,222.21
Division of State Parks .....	567,685.31

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\$ 2,081,907.52

## Expenditures:

Division of Forestry .....	\$ 1,503,177.47
Division of State Parks .....	457,196.32

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—1,960,373.79

Balance .....	\$ 121,533.73*†
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## \* Forestry:

Federal Fund .....	\$ 4,554.21
Manchester Forest .....	1,150.78
Radio Communications .....	5,339.75

## † Parks:

Appro. Earmarked for Colored Park .....	49,950.00
Hunting Island Deposits .....	2,123.36
Greenwood Park .....	1,867.37
M. B. Fishing Pier .....	12,463.60
Parks Improvements .....	8,754.58
Parks Notes & Interest .....	35,330.08
	<hr/>
	\$121,533.73

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1955-56

UNIT	Organized Personnel					Volunteer Personnel	Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville .....	1	2	..	1	4	214	218
Aiken .....	1	4	2	5	12	901	913
Allendale .....	1	2	1	3	7	98	105
Anderson .....	1	2	1	3	7	172	179
Bamberg .....	1	2	1	2	6	327	333
Barnwell .....	1	2	2	2	7	517	524
Beaufort .....	1	3	2	3	9	349	358
Berkeley .....	1	4	2	4	11	226	237
Calhoun .....	1	2	1	2	6	252	258
Charleston .....	1	4	1	3	9	305	314
Cherokee .....	1	1	..	1	3	227	230
Chester .....	1	3	..	1	5	115	120
Chesterfield .....	1	3	1	4	9	224	233
Clarendon .....	1	3	2	3	9	429	438
Colleton .....	1	4	2	5	12	600	612
Darlington .....	1	2	..	3	6	665	671
Dillon .....	1	2	1	2	6	235	241
Dorchester .....	1	3	2	3	9	164	173
Edgefield .....	1	2	..	1	4	168	172
Fairfield .....	1	4	1	3	9	300	309
Florence .....	1	4	2	4	11	615	626
Georgetown .....	1	4	2	4	11	679	690
Greenville .....	1	3	..	4	8	1,332	1,340
Greenwood .....	1	2	..	2	5	187	192
Hampton .....	1	3	1	3	8	237	245
Horry .....	1	5	2	4	12	746	758
Jasper .....	1	3	1	2	7	438	445
Kershaw .....	1	3	2	6	12	411	423
Lancaster .....	1	3	1	2	7	287	294
Laurens .....	1	3	1	2	7	201	208
Lee .....	1	2	1	3	7	502	509
Lexington .....	1	3	2	5	11	849	860
McCormick .....	1	1	1	1	4	68	72
Marion .....	1	3	2	3	9	357	366
Marlboro .....	1	3	1	3	8	561	569
Newberry .....	1	2	1	2	6	146	152
Oconee .....	1	2	..	3	6	257	263
Orangeburg .....	1	5	2	5	13	932	945
Pickens .....	1	3	..	4	8	134	142
Richland .....	1	5	1	4	11	487	498
Saluda .....	1	2	..	1	4	180	184
Spartanburg .....	1	3	1	4	9	190	199
Sumter .....	1	3	1	3	8	791	799
Union .....	1	2	..	1	4	168	172
Williamsburg .....	1	5	2	4	12	965	977
York .....	1	2	1	4	8	402	410
Totals.....	46	133	50	137	366	18,610	18,976



TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1955—JUNE 30, 1956

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	67	1.5	307.4	4.6
August .....	27	0.6	179.7	6.7
September .....	38	0.8	85.3	2.2
October .....	73	1.6	195.7	2.7
November .....	237	5.3	2,046.5	8.6
December .....	543	12.1	4,590.7	8.5
January .....	1,164	25.8	24,643.0	21.2
February .....	338	7.5	4,975.2	14.7
March .....	1,052	23.3	19,484.2	18.5
April .....	611	13.6	17,748.5	29.0
May .....	143	3.2	873.3	6.1
June .....	213	4.7	1,614.0	7.6
Totals.....	4,506	100.0	76,743.5	17.0

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1955-1956

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Abbeville	..	34.1	..	139.0	1	88.2	7	135.8	8	57.0	5	183.4	..	..	2	4.8	23	469.2
Aiken	7	..	2	..	9	64.3	71	309.5	30	239.0	39	997.0	4	18.4	43	242.2	205	2043.5
Allendale	..	..	..	..	..	..	20	126.0	23	304.6	15	139.0	..	..	6	172.0	64	741.6
Anderson	..	..	..	..	..	..	15	71.2	18	50.0	15	88.1	2	7.3	..	..	50	216.6
Bamberg	..	..	..	..	..	..	16	350.0	35	235.0	18	247.5	2	5.0	4	54.0	75	911.5
Barnwell	..	..	..	..	7	84.3	38	195.7	34	179.0	24	164.0	3	36.7	3	6.0	109	665.7
Beaufort	..	..	..	..	..	5.4	4	30.7	13	136.3	48	2125.3	3	..	5	51.6	71	2349.3
Berkeley	1	1.1	1	3.0	1	24.0	16	282.0	10	82.2	168	1591.6	..	3.0	9	23.6	207	2010.5
Calhoun	..	..	..	..	4	443.5	19	85.9	2	3.9	18	208.0	..	..	3	5.1	46	746.1
Charleston	..	..	..	..	4	23.0	34	357.4	15	85.0	47	1423.0	4	102.5	4	12.7	108	2003.6
Cherokee	1	18.0	1	7.5	1	11.0	8	22.6	7	83.5	3	16.8	..	..	3	5.0	24	164.4
Chester	..	..	4	10.2	2	11.6	9	33.8	6	16.2	4	81.8	..	..	2	2.1	27	155.7
Chesterfield	2	56.0	1	1.0	2	5.1	13	47.1	17	172.7	30	586.1	2	60.1	4	12.2	71	940.3
Clarendon	..	..	..	..	11	90.2	35	432.1	50	772.1	98	1835.6	6	19.7	7	39.9	207	3189.6
Colleton	..	..	..	63.0	2	4.0	31	299.7	30	255.4	74	1018.0	5	21.3	4	56.5	149	1717.9
Darlington	2	0.3	..	..	6	35.1	50	594.2	26	143.0	15	69.2	5	14.3	13	71.6	117	927.7
Dillon	..	..	..	3.0	2	28.0	23	40.5	27	118.0	12	126.4	2	7.5	2	3.3	69	326.7
Dorchester	1	24.0	1	3.0	1	5.0	19	244.1	19	625.1	24	453.0	..	..	3	18.0	68	1372.2
Edgefield	6	70.8	1	28.0	..	..	6	20.0	11	52.2	4	13.3	2	2.5	2	7.0	32	193.8
Fairfield	1	3.0	9	71.6	6	162.8	15	69.0	6	12.0	..	..	6	14.5	5	17.9	45	350.8
Florence	..	..	..	..	2	23.0	57	356.2	60	679.7	83	839.9	3	24.8	6	78.0	211	2001.6
Georgetown	4	82.5	..	..	2	13.5	12	48.8	24	232.0	78	3142.1	3	13.5	10	43.2	133	3625.6
Greenville	2	0.2	1	8.0	6	6.1	59	233.8	42	163.1	24	147.2	3	7.3	43	5440.3	180	6006.0
Greenwood	3	3.7	4	49.8	1	5.0	19	141.6	7	30.1	7	477.0	1	0.3	3	8.8	45	716.3
Hampton	..	..	..	..	2	7.0	8	15.8	12	243.4	44	408.2	..	..	4	3.2	70	677.6
Horry	..	..	1	0.6	3	5.2	29	638.1	60	938.2	96	4476.1	1	8.0	14	332.6	204	6398.8
Jasper	2	12.2	3	231.2	1	20.0	18	359.0	22	611.9	53	910.0	3	47.1	3	214.0	105	4505.4
Kershaw	..	..	1	30.0	..	..	21	112.7	12	996.0	21	2328.6	6	629.5	4	36.5	65	4133.3
Lancaster	..	..	2	19.2	1	0.6	14	115.1	11	15.6	6	26.2	3	5.1	8	36.7	45	218.5
Laurens	..	..	2	16.5	1	1.2	16	154.6	5	35.6	5	66.2	5	129.0	5	6.2	39	409.3
Lee	..	..	..	..	..	..	25	465.4	43	555.6	42	1261.8	4	97.8	2	10.0	118	2392.7
Lexington	2	2.1	..	26.6	13	1604.3	35	178.5	32	123.2	16	68.3	3	10.0	4	3.2	114	2037.1
Marion	3	23.0	8	1.0	..	..	16	26.6	23	211.4	24	110.8	3	4.8	4	4.0	68	358.6
Marlboro	..	..	1	8.5	..	..	12	55.1	35	334.9	114	1950.6	6	44.5	6	4.9	175	2338.5
McCormick	..	..	..	..	..	..	5	10.4	2	2.3	3	16.2	1	0.8	1	0.1	12	29.8
Newberry	..	..	..	2.4	1	2.6	7	31.3	5	8.0	..	..	1	0.9	5	40.0	22	85.2



Oconee .....	5	1.9	6	34.1	1	1.0	13	58.8	18	169.3	6	56.3	1	0.6	17	27.7	67	349.7
Orangeburg .....	3	56.7	1	4.0	2	114.0	53	733.7	33	415.7	256	6871.0	4	46.3	8	149.6	360	8391.0
Pickens .....	2	3.2	1	0.6	1	0.5	7	8.9	5	7.8	1	0.8	1	1.0	6	882.7	24	905.5
Richland .....	1	46.0	7	23.0	8	66.7	68	735.2	27	666.9	66	701.1	3	19.8	13	39.3	193	2298.0
Saluda .....	..	....	..	....	..	....	9	28.0	9	26.3	4	8.5	4	15.6	3	11.6	29	90.0
Spartanburg .....	..	....	..	8.0	..	....	17	121.8	18	173.8	5	68.7	3	10.0	3	15.5	48	397.8
Sumter .....	..	....	..	9.0	5	70.4	38	784.5	40	1023.4	48	527.1	2	3.6	7	12.5	141	2430.5
Union .....	..	....	..	2.5	..	....	12	80.5	4	78.0	8	79.5	3	29.5	..	....	28	270.0
Williamsburg .....	..	....	..	....	7	33.7	30	210.6	43	559.3	95	2887.2	2	11.5	5	17.8	182	3720.1
York .....	..	....	..	46.0	..	....	25	90.7	16	61.6	11	197.3	1	0.2	5	3.8	61	399.6
Totals.....	48	488.8	71	2950.3	117	3060.3	1074	9543.0	995	12055.3	1777	38993.8	112	1474.3	312	8227.7	4506	76743.5

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1955-56

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL NO.
Abbeville .....	1	15	5	2	....	23
Aiken .....	26	147	28	4	....	205
Allendale .....	1	52	9	2	....	64
Anderson .....	2	45	3	....	....	50
Bamberg .....	....	55	19	1	....	75
Barnwell .....	2	98	9	....	....	109
Beaufort .....	9	39	21	1	1	71
Berkeley .....	19	152	33	3	....	207
Calhoun .....	6	33	6	1	....	46
Charleston .....	4	74	27	3	....	108
Cherokee .....	1	15	8	....	....	24
Chester .....	2	21	4	....	....	27
Chesterfield .....	5	52	13	1	....	71
Clarendon .....	16	129	57	5	....	207
Colleton .....	5	103	41	....	....	149
Darlington .....	12	82	22	1	....	117
Dillon .....	24	37	8	....	....	69
Dorchester .....	2	52	13	1	....	68
Edgefield .....	1	24	7	....	....	32
Fairfield .....	2	38	4	1	....	45
Florence .....	20	156	33	2	....	211
Georgetown .....	16	81	33	1	2	133
Greenville .....	62	94	23	....	1	180
Greenwood .....	1	35	8	1	....	45
Hampton .....	6	52	11	1	....	70
Horry .....	17	111	65	10	1	204
Jasper .....	9	52	41	2	1	105
Kershaw .....	1	42	18	1	3	65
Lancaster .....	5	33	7	....	....	45
Laurens .....	1	25	13	....	....	39
Lee .....	5	66	42	5	....	118
Lexington .....	19	83	11	....	1	114
Marion .....	14	50	3	1	....	68
Marlboro .....	20	122	31	1	1	175
McCormick .....	4	7	1	....	....	12
Newberry .....	2	18	2	....	....	22
Oconee .....	14	46	7	....	....	67
Orangeburg .....	1	206	136	17	....	360
Pickens .....	6	16	....	1	1	24
Richland .....	16	129	46	2	....	193
Saluda .....	5	21	3	....	....	29
Spartanburg .....	4	34	10	....	....	48
Sumter .....	10	87	38	6	....	141
Union .....	....	22	6	....	....	28
Williamsburg .....	31	100	42	9	....	182
York .....	6	47	7	1	....	61
Totals.....	435	2998	974	87	12	4506



UNIT	July 1955		Aug. 1955		Sept. 1955		Oct. 1955		Nov. 1955		Dec. 1955		Jan. 1956		Feb. 1956		Mar. 1956		April 1956		May 1956		June 1956	
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Abbeville	1	5.4	..	..	1	7.0	..	..	1	3.6	2	16.0	7	34.1	..	..	4	275.0	4	14.3	1	3.6	2	110.2
Aiken	8	12.0	4	4.5	3	18.1	9	39.5	24	110.8	19	45.8	33	123.4	8	71.2	53	1017.8	26	517.5	4	16.5	14	66.0
Allendale	..	..	..	..	..	..	..	..	6	28.0	5	168.0	8	178.0	1	16.0	20	92.5	10	106.1	5	38.0	3	115.0
Anderson	..	..	..	3.6	..	7.4	3	10.5	4	4.5	10	45.0	18	107.0	1	1.0	10	49.8	4	22.2	6	19.9	2	13.0
Bamberg	..	..	..	..	..	..	..	..	7	23.5	10	45.0	27	349.0	6	269.5	13	168.0	5	27.5	2	5.5	2	..
Barnwell	..	..	..	..	..	..	..	..	6	44.8	21	67.1	32	214.9	15	124.8	14	57.8	12	83.2	4	56.0	..	..
Beaufort	1	0.3	..	8.4	..	..	1	0.2	6	35.0	9	81.8	19	228.1	5	67.4	14	257.4	12	1658.4	4	20.0	..	..
Berkeley	..	..	..	..	..	..	..	..	2	10.5	13	38.5	44	380.8	19	136.9	69	634.4	55	791.3	..	..	..	..
Calhoun	..	..	..	..	..	..	..	..	2	2.1	3	9.8	13	208.1	4	15.3	9	40.0	8	462.2	2	22.0	..	..
Charleston	3	24.1	..	66.0	..	..	1	1.2	4	5.7	3	95.5	24	215.9	8	117.0	37	978.9	16	434.5	2	22.0	..	..
Cherokee	..	..	..	..	..	..	..	1.8	2	1.5	6	21.5	3	7.0	..	..	9	108.6	2	20.0	..	..	..	..
Chester	..	..	..	..	..	0.9	1	18.0	5	7.3	2	5.1	10	21.6	1	5.4	9	108.6	2	20.0	..	..	..	..
Chesterfield	2	56.0	..	..	..	..	..	..	4	22.1	7	24.1	19	141.5	..	..	25	660.6	9	30.8	..	..	..	..
Clarendon	..	..	..	3.0	..	1.5	..	..	3	162.0	35	219.1	61	1219.0	31	524.1	38	390.5	21	606.1	11	30.3	5	34.0
Colleton	..	..	..	..	..	..	..	0.2	8	23.6	8	82.0	33	292.0	20	315.2	42	713.6	25	226.5	4	26.0	8	38.8
Darlington	2	2.0	..	5.8	..	..	6	20.3	4	12.8	27	168.9	26	171.7	1	3.4	29	390.3	10	50.4	5	53.0	6	49.1
Dillon	..	..	..	..	..	1.1	1	0.2	9	37.0	9	59.6	12	83.1	7	16.8	20	73.9	7	48.9	2	3.1	1	3.0
Dorchester	1	8.0	..	..	..	..	..	..	7	18.0	5	48.0	15	172.2	14	254.0	11	281.0	10	554.0	..	..	..	..
Edgefield	1	1.0	..	11.0	..	..	..	0.6	2	1.2	2	31.6	8	24.2	1	1.8	3	22.2	2	17.6	..	..	..	..
Fairfield	3	10.0	1	4.0	1	0.5	..	..	2	0.7	6	32.1	5	11.0	..	..	9	197.2	7	70.4	3	3.8	9	74.5
Florence	..	..	..	..	..	..	..	..	9	85.8	46	342.8	57	544.3	22	213.5	34	594.7	28	167.6	4	4.3	6	41.6
Georgetown	2	3.1	..	..	..	0.5	..	0.1	3	19.1	14	74.6	20	192.3	17	267.5	37	245.4	23	90.2	6	12.5	10	19.2
Greenville	6	10.3	1	0.1	5	1.7	6	5.5	12	29.2	28	64.4	43	5523.9	3	3.6	34	287.2	26	257.9	8	12.5	6	6.6
Greenwood	2	9.7	..	..	..	..	1	0.3	2	7.8	6	21.4	17	176.7	..	..	5	22.0	6	471.8	..	..	..	..
Hampton	..	..	..	..	..	..	..	..	2	8.5	5	17.0	26	131.4	5	95.5	13	79.4	8	294.5	6	30.2	3	18.5
Horry	1	0.7	..	..	..	4.5	2	5.1	5	23.2	15	175.6	51	838.9	22	254.6	59	1708.3	42	3345.9	4	41.5	2	0.5
Jasper	2	12.2	1	9.8	..	..	1	1.0	4	32.2	19	117.0	24	2739.0	15	295.2	20	443.8	18	852.7	1	2.5	..	..
Kershaw	1	0.2	..	..	..	7.0	..	..	2	6.5	7	101.0	10	96.5	3	122.5	24	2986.0	10	702.6	2	0.3	..	..
Lancaster	2	13.6	..	..	..	4.1	..	..	3	28.4	9	53.5	8	26.5	..	..	9	25.9	7	42.8	1	0.3	..	..
Laurens	2	8.6	..	..	..	2.4	2	1.6	4	13.7	3	12.5	8	87.2	..	..	10	161.9	5	74.6	3	31.8	1	15.0
Lee	2	6.1	1	1.0	..	..	..	8.5	12	502.9	10	321.0	39	686.4	6	79.8	26	649.5	7	56.5	2	6.0	10	75.0
Lexington	2	20.1	2	7.5	..	5.0	5	5.6	7	17.2	12	29.3	19	79.7	3	3.5	23	162.1	22	1667.6	8	19.0	9	20.5
Marion	..	..	..	..	..	..	..	0.9	3	2.5	15	25.8	11	36.8	3	7.9	19	220.9	11	62.1	2	1.4	3	0.3
Marlboro	1	0.5	1	0.3	..	..	1	6.0	10	362.6	24	91.0	42	305.8	19	177.0	52	1215.0	15	216.1	5	6.4	5	17.8
McCormick	1	3.0	..	..	..	..	..	..	..	..	..	..	3	4.1	1	9.5	3	1.0	1	11.0	1	0.5	2	0.7
Newberry	..	..	..	..	..	0.9	..	2.0	1	2.1	1	1.4	7	45.4	..	..	5	13.6	1	0.1	2	15.8	2	3.9
Oconee	4	1.0	2	0.8	..	2.2	2	5.8	4	9.9	7	7.4	17	31.9	1	3.0	11	196.1	10	43.5	1	2.0	5	46.1
Orangeburg	3	33.0	1	34.0	..	..	3	10.5	12	128.9	44	948.0	151	4189.6	30	665.0	67	1431.0	29	549.7	4	21.5	16	379.8
Pickens	1	0.6	..	..	..	..	1	0.1	5	6.1	21	3.0	2	878.0	2	1.7	6	4.8	5	9.7	1	1.5	..	..
Richland	6	52.3	2	9.6	..	2.7	4	10.3	6	22.4	21	173.6	53	583.2	6	36.9	50	1120.7	19	129.3	10	75.1	12	42.8
Saluda	1	0.4	..	..	..	7.8	..	..	6	..	3	11.0	9	66.2	1	3.2	13	190.0	2	0.6	1	1.6	2	9.5
Spartanburg	1	0.1	1	1.0	..	0.3	1	0.3	6	..	2	0.3	2	..	..	..	50	1120.7	19	129.3	10	75.1	12	42.8
Sumter	..	..	..	..	..	..	..	..	10	70.3	28	617.5	41	1049.5	6	222.5	25	268.8	19	134.4	4	15.0	5	39.5
Union	2	10.0	1	2.5	..	4.5	..	..	..	..	1	0.5	6	44.0	..	..	13	190.0	9	74.4	1	1.6	2	9.5
Williamsburg	..	..	1	4.2	..	..	1	0.2	6	50.4	19	114.4	61	2009.8	23	570.2	52	761.6	18	202.8	..	..	3	13.0
York	2	2.1	1	0.2	..	5.2	2	2.5	1	0.6	5	5.4	13	68.2	1	1.8	15	185.9	15	80.0	3	46.0	2	6.5
Totals	67	307.4	27	179.7	38	85.3	73	195.7	237	2046.5	543	4590.7	1164	24643.0	338	4975.2	1052	19484.2	611	17748.5	143	873.3	213	1614.0

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1955-56

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area per Fire (Acres)
Lightning .....	48	1.1	438.8	9.1
Railroads .....	71	1.6	2,950.3	41.6
Campers .....	117	2.6	3,060.3	26.2
Smokers .....	1,074	23.8	9,543.0	8.9
Debris Burning.....	995	22.1	12,055.3	12.1
Incendiary .....	1,777	39.4	38,993.8	21.9
Lumbering .....	112	2.5	1,474.3	13.2
Miscellaneous .....	312	6.9	8,227.7	26.4
Totals.....	4,506	100.0	76,743.5	17.0

TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1951-52	1952-53	1953-54	1954-55	1955-56	Average For 5-Year Period
Lightning .....	1.5	1.6	0.6	2.4	1.1	1.4
Railroads .....	3.1	1.3	1.7	2.7	1.6	2.1
Campers .....	2.3	2.8	2.4	2.6	2.6	2.5
Smokers .....	22.9	24.6	25.6	26.1	23.8	24.6
Debris Burning.....	19.5	19.6	20.9	19.3	22.1	20.3
Incendiary .....	41.5	38.6	41.0	37.0	39.4	39.5
Lumbering .....	2.0	1.9	2.5	3.4	2.5	2.5
Miscellaneous .....	7.2	9.6	5.3	6.5	6.9	7.1



TABLE 3—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1955-56

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	23	469.2	.28	20.4
Aiken .....	450,200	205	2,043.5	.45	10.0
Allendale .....	131,400	64	741.6	.56	11.6
Anderson .....	173,700	50	216.6	.12	4.3
Bamberg .....	126,000	75	911.5	.72	12.2
Barnwell .....	147,800	109	665.7	.45	6.1
Beaufort .....	188,400	71	2,349.3	1.25	33.1
Berkeley .....	398,974	207	2,010.5	.50	9.7
Calhoun .....	123,500	46	746.4	.60	16.2
Charleston .....	271,994	108	2,003.6	.74	18.6
Cherokee .....	127,800	24	164.4	.13	6.9
Chester .....	260,023	27	155.7	.06	5.8
Chesterfield .....	310,000	71	940.3	.30	13.2
Clarendon .....	228,500	207	3,189.6	1.40	15.4
Colleton .....	465,000	149	1,717.9	.37	11.5
Darlington .....	208,500	117	927.7	.44	7.9
Dillon .....	144,100	69	326.7	.23	4.7
Dorchester .....	268,200	68	1,372.2	.51	20.2
Edgefield .....	172,641	32	193.8	.11	6.1
Fairfield .....	338,957	45	350.8	.10	7.8
Florence .....	293,900	211	2,001.6	.68	9.5
Georgetown .....	415,600	133	3,625.6	.87	27.3
Greenville .....	267,800	180	6,006.0	2.24	33.4
Greenwood .....	198,913	45	716.3	.36	15.9
Hampton .....	239,500	70	677.6	.28	9.7
Horry .....	557,600	204	6,398.8	1.15	31.4
Jasper .....	280,000	105	4,505.4	1.61	42.9
Kershaw .....	336,500	65	4,133.3	1.23	63.6
Lancaster .....	199,400	45	218.5	.11	4.9
Laurens .....	244,735	39	409.3	.17	10.5
Lee .....	110,600	118	2,392.7	2.16	20.3
Lexington .....	291,500	114	2,037.1	.70	17.9
Marion .....	224,700	68	358.6	.16	5.3
Marlboro .....	150,600	175	2,398.5	1.59	13.7
McCormick .....	144,840	12	29.8	.02	2.5
Newberry .....	205,003	22	85.2	.04	3.9
Oconee .....	259,252	67	349.7	.13	5.2
Orangeburg .....	318,800	360	8,391.0	2.63	23.3
Pickens .....	190,100	24	905.5	.48	37.7
Richland .....	289,500	193	2,298.0	.79	11.9
Saluda .....	149,956	29	90.0	.06	3.1
Spartanburg .....	208,300	48	397.8	.19	8.3
Sumter .....	205,400	141	2,430.5	1.18	17.2
Union .....	157,894	28	270.0	.17	9.6
Williamsburg .....	429,300	182	3,720.1	.87	20.4
York .....	226,300	61	399.6	.18	6.6
Totals.....	11,300,008	4,506	76,743.5	.68	17.0

TABLE 9—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1951-52 .....	11,300,008	4,982	108,450.1	0.96	21.8
1952-53 .....	11,300,008	4,928	78,193.8	0.69	15.9
1953-54 .....	11,300,008	6,532	119,149.2	1.05	18.2
1954-55 .....	11,300,008	7,022	158,785.5	1.41	22.6
1955-56 .....	11,300,008	4,506	76,743.5	0.68	17.0
5-Year Average.....	11,300,008	5,594	108,264.4	0.96	19.4



TABLE 10—1955-56 SEEDLING DISTRIBUTION BY LAND CLASSIFICATION

Land Ownership	Loblolly	Slash	Longleaf	Red Cedar	Other Species	Totals
Farms .....	4,253,200	5,266,800	131,200	139,600	.....	9,790,800
Association and Clubs.....	112,500	6,500	500	.....	.....	119,500
Schools .....	42,700	20,700	750	.....	.....	64,150
State Forests.....	.....	671,000	7,000	6,000	.....	684,000
Other State Lands.....	671,500	574,500	.....	.....	.....	1,246,000
Other Public Lands.....	33,000	13,500	2,000	.....	.....	48,500
Other Individuals.. ..	2,763,250	3,033,850	41,000	34,450	†300	5,872,850
Forest Industries.....	8,761,600	4,591,300	22,000	1,000	.....	13,375,900
Other Industries.....	862,750	402,250	72,500	.....	.....	1,337,500
Federal Lands.....	343,000	125,000	3,000	2,000	*11,350	484,350
Totals.....	17,843,500	14,705,400	279,950	183,050	11,650	33,023,550
Out-of-State Stock Planted in S. C.						
N. C. Stock.....	15,000	1,300,000	.....	.....	.....	1,315,000
Georgia Stock.....	75,000	.....	.....	.....	.....	75,000
Shipped Out-of-State.....	500	.....	100	.....	.....	600
Grand Totals.....	17,934,000	16,005,400	280,050	183,050	11,650	34,414,150

† Virginia Pine.

\* Experimental.

TABLE 11—S. C. STATE COMMISSION OF FORESTRY 1955-56 SEEDLING DISTRIBUTION BY COUNTY, SPECIES AND AMOUNT

County	Loblolly	Slash	Longleaf	Red Cedar	Other Species	Totals
Abbeville .....	511,500	26,000	.....	2,000	.....	539,500
Aiken .....	69,000	1,582,000	107,000	29,250	.....	1,787,250
Allendale .....	111,000	447,500	.....	.....	.....	558,500
Anderson .....	368,250	.....	1,000	5,000	.....	374,250
Bamberg .....	6,500	229,500	1,000	1,000	.....	238,000
Barnwell .....	31,000	529,500	.....	11,500	.....	572,000
Beaufort .....	205,000	145,600	.....	200	.....	350,800
Berkeley .....	1,316,000	509,000	15,000	3,000	*4,650	1,847,650
Calhoun .....	52,500	52,500	1,500	2,500	.....	109,000
Charleston .....	619,500	109,000	.....	.....	.....	728,500
Cherokee .....	129,500	.....	2,000	.....	.....	131,500
Chester .....	1,003,425	38,000	200	.....	.....	1,041,625
Chesterfield .....	180,000	566,300	6,000	2,000	.....	754,300
Clarendon ..	168,700	335,000	5,000	1,000	.....	509,700
Colleton .....	1,164,000	595,500	.....	.....	.....	1,759,500
Darlington .....	151,000	192,000	9,500	.....	.....	352,500
Dillon .....	28,500	40,500	.....	.....	.....	69,000
Dorchester .....	1,434,000	283,000	5,000	.....	.....	1,722,000
Edgefield .....	225,000	70,000	1,000	2,000	.....	298,000
Fairfield .....	651,575	7,000	.....	3,000	.....	661,575
Florence .....	84,000	62,000	4,000	500	.....	150,500
Georgetown .....	610,000	798,000	.....	2,000	.....	1,410,000
Greenville .....	347,750	2,250	1,000	7,500	.....	358,500
Greenwood .....	475,000	16,000	500	.....	.....	491,500
Hampton .....	445,000	1,196,500	.....	200	.....	1,641,700
Horry .....	590,450	659,700	200	2,000	.....	1,252,350
Jasper .....	225,000	1,561,500	5,000	.....	.....	1,791,500
Kershaw .....	427,500	1,151,500	10,000	2,000	.....	2,197,000
Lancaster .....	361,100	112,500	11,000	1,200	.....	485,800
Laurens .....	694,600	49,000	1,500	3,000	.....	748,100
Lee .....	57,500	.....	1,000	4,500	.....	63,000
Lexington .....	171,500	497,000	32,500	4,500	.....	705,500
Marion .....	297,750	82,500	.....	.....	.....	380,250
Marlboro .....	393,000	81,500	3,000	15,200	.....	492,700
McCormick .....	373,000	20,000	1,000	.....	.....	394,000
Newberry .....	483,600	59,000	2,000	1,000	.....	545,600
Oconee .....	291,500	.....	.....	500	.....	292,000
Orangeburg .....	49,000	529,250	15,000	14,500	.....	607,750
Pickens .....	886,500	.....	.....	5,000	.....	891,500
Richland .....	397,500	787,300	15,000	7,500	.....	1,207,300
Saluda .....	209,000	500	1,500	.....	.....	211,000
Spartanburg .....	373,500	4,500	.....	18,000	.....	396,000
Sumter .....	174,000	466,500	11,000	17,000	.....	668,500
Union .....	507,800	14,300	2,300	11,000	†6,700	542,100
Williamsburg .....	68,000	190,000	1,000	1,500	.....	260,500
York .....	424,000	200	7,250	2,000	.....	433,450
Planting Site Unknown and Experimental .....	.....	.....	.....	.....	†300	300
Totals.....	17,843,500	14,705,400	279,950	183,050	11,650	33,023,550
Shipped Out-of-State.....	500	.....	100	.....	.....	600
S. C. Production.....	17,844,000	14,705,400	280,050	183,050	11,650	33,024,150

\*Experimental.  
†Virginia Pine.

Also Planted in State: Pickens County—Georgia Loblolly..... 75,000  
Also Planted in State: Planting site unknown—N. C. Slash..... —1,300,000  
Also Planted in State: Planting site unknown—N. C. Loblolly..... 15,000

GRAND TOTAL PLANTED IN STATE—1955-56 Season:  
S. C. Stock.....33,023,550  
Out-of-State Stock..... 1,390,000  
**34,413,550**



TABLE 12—ACCUMULATED TREES PLANTED RECORD AND PLANTING NEEDS

County	Seedlings Planted 1929-1955	Seedlings Planted 1955-1956	Grand Total Planted To Date	Acres Planted Through June 30, 1956	Acres Needing Planting as of June 30, 1956
Abbeville .....	7,009,688	539,500	7,549,188	7,549	5,636
Aiken .....	19,898,260	1,787,250	21,685,510	21,686	142,923
Allendale .....	10,450,895	558,500	11,009,395	11,009	18,041
Anderson .....	9,136,197	374,250	9,510,447	9,510	14,504
Bamberg .....	1,832,200	238,000	2,070,200	2,070	19,702
Barnwell .....	11,543,425	572,000	12,115,425	12,115	23,735
Beaufort .....	2,124,445	350,800	2,475,245	2,475	43,833
Berkeley .....	11,399,385	1,847,650	13,247,035	13,247	43,638
Calhoun .....	2,904,350	109,000	3,013,350	3,013	3,471
Charleston .....	2,020,040	728,500	2,748,540	2,749	51,316
Cherokee .....	4,316,029	131,500	4,447,529	4,448	15,227
Chester .....	8,341,575	1,041,625	9,383,200	9,383	29,997
Chesterfield .....	13,288,850	754,300	14,043,150	14,043	128,431
Clarendon .....	5,526,215	509,700	6,035,915	6,036	21,853
Colleton .....	7,074,880	1,759,500	8,834,380	8,834	21,098
Darlington .....	3,361,320	352,500	3,713,820	3,714	11,497
Dillon .....	2,334,255	69,000	2,403,255	2,403	13,180
Dorchester .....	5,629,680	1,722,000	7,351,680	7,352	25,678
Edgefield .....	4,677,518	298,000	4,975,518	4,976	6,315
Fairfield .....	6,729,884	661,575	7,391,459	7,391	16,563
Florence .....	2,303,218	150,500	2,453,718	2,454	25,515
Georgetown .....	5,727,800	1,410,000	7,137,800	7,138	30,049
Greenville .....	3,884,679	358,500	4,243,179	4,243	24,412
Greenwood .....	8,036,702	491,500	8,528,202	8,528	12,828
Hampton .....	7,342,015	1,641,700	8,983,715	8,984	14,575
Horry .....	5,679,350	1,252,350	6,931,700	6,932	48,234
Jasper .....	8,946,710	1,791,500	10,738,210	10,738	22,020
Kershaw .....	25,661,537	2,197,000	27,858,537	27,859	91,048
Lancaster .....	8,668,593	485,800	9,154,393	9,154	34,021
Laurens .....	8,508,390	748,100	9,256,490	9,256	16,843
Lee .....	1,880,355	63,000	1,943,355	1,943	29,783
Lexington .....	5,843,290	705,500	6,548,790	6,549	81,337
McCormick .....	2,397,125	394,000	2,791,125	2,791	14,384
Marion .....	2,052,545	380,250	2,432,795	2,433	18,828
Marlboro .....	5,957,330	492,700	6,450,030	6,450	21,455
Newberry .....	8,308,163	545,600	8,853,763	8,854	8,250
Oconee .....	4,277,035	292,000	4,569,035	4,569	12,746
Orangeburg .....	7,305,700	607,750	7,913,450	7,913	13,732
Pickens .....	4,343,855	891,500	5,235,355	5,235	5,272
Richland .....	7,736,278	1,207,300	8,943,578	8,944	90,358
Saluda .....	2,627,541	211,000	2,838,541	2,839	12,301
Spartanburg .....	8,276,799	396,000	8,672,799	8,673	28,557
Sumter .....	18,278,465	668,500	18,946,965	18,947	10,757
Union .....	9,191,099	542,100	9,733,199	9,733	23,378
Williamsburg .....	3,891,065	260,500	4,151,565	4,152	36,178
York .....	8,085,156	433,450	8,518,606	8,519	32,719
Totals.....	324,809,886	33,023,250	357,833,136	357,833	1,416,218





STATE OF SOUTH CAROLINA

**REPORT**

OF THE

**STATE COMMISSION OF FORESTRY**

FOR THE YEAR

JULY 1, 1956 TO JUNE 30, 1957



CHARLES H. FLORY, State Forester  
COLUMBIA, S. C.

Printed Under the Direction of the  
State Budget and Control Board

## TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL .....	3
PERSONNEL .....	4
SUMMARY .....	19
Recommendations .....	25
FOREST MANAGEMENT .....	29
Management Assistance .....	29
Reforestation .....	35
Cooperative Forest Management .....	39
Watershed Projects .....	40
State Forests .....	40
Cassatt State Forest .....	41
Harbison State Forest .....	42
Manchester State Forest .....	42
Sand Hills State Forest .....	45
Experimental Studies .....	49
FOREST FIRE PROTECTION .....	51
Introduction .....	51
Fire Protection Activities .....	53
Improvements, Tools and Equipment .....	57
Forest Fire Summary .....	63
INFORMATION AND EDUCATION .....	67
Forest Fire Prevention .....	68
Cooperative Forest Fire Prevention Campaign .....	69
Forest Fire Record .....	70
School Programs .....	70
Forestry Demonstrations .....	70
Conservation Week and Arbor Day .....	71
Fire Prevention Roadside Signs .....	72
Motion Pictures .....	73
Vocational Agriculture School Forestry Program .....	73
Resource-Use Education .....	75
Talks .....	75
Exhibits .....	76
Radio and Television .....	78
Training .....	79
News Releases and Articles .....	80
Boys' Forestry Camp .....	81
Publications .....	81
Sign and Woodworking Shop .....	82
South Carolina Tree Farm System .....	82
STATE PARKS .....	91
Appropriations .....	92
Family Vacation Cabins .....	92
Group Camps .....	94
Tent and Trailer Camping .....	94
Fish Restocking Program .....	94
State Park Acquisition and Development .....	95
Historical Areas .....	97
ADMINISTRATION .....	101
Personnel Accident and Injury .....	101
Automotive Accidents .....	101
Commission Purchasing .....	102
Personnel .....	102
Training .....	104
APPENDIX .....	105



*To Honorable George Bell Timmerman, Jr., Governor, and to  
the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Acts of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1956 to June 30, 1957.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,  
Fulton B. Creech, *Chairman.*

## PERSONNEL

### S. C. STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1957.)

#### *Members of the Commission*

Fulton B. Creech, Chairman, Sumter, S. C.

A. Leland Slade, Sr., Edgefield, S. C.

Dr. R. F. Poole, President, Clemson College, Clemson, S. C.

A. B. Taylor, Spartanburg, S. C.

John C. Pracht, Greenwood, S. C.

#### *Secretary of the Commission*

Chas. H. Flory, State Forester

### DIVISION OF STATE PARKS

C. West Jacocks, State Park Director

T. D. Ravenel, Assistant State Park Director—Operations

E. R. Vreeland, Assistant State Park Director—Operations

#### *State Park Superintendents*

Aiken State Park, Richard C. Condrey, Jr., Supt., Windsor, S. C.

Andrew Jackson Historical State Park, Cecil S. Hayes, Ranger, Rt. 1, Lancaster, S. C.

Barnwell State Park, Mrs. D. I. Ross, Supt., Blackville, S. C.

\*Cheraw State Park, George T. Holder, Supt., Cheraw, S. C.

Chester State Park, Clarence Doster, Supt., Chester, S. C.

Croft State Park, J. E. Thornton, Ranger, Spartanburg, S. C.

Edisto Beach State Park, Carl S. Foxworth, Supt., Edisto Island, S. C.

Givhans Ferry State Park, Wm. Wiggins, Jr., Supt., Ridgeville, S. C.

\*Greenwood State Park, M. R. LeRoy, Supt., Ninety Six, S. C.

\*Hunting Island State Park, Robert G. Jones, Supt., Frogmore, S. C.

Kings Mountain State Park, Raymond M. Sisk, Supt., Kings Creek, S. C.

Lee State Park, Van W. Pressley, Supt., Bishopville, S. C.

Little Pee Dee State Park, LaFon Norton, Supt., Dillon, S. C.



Myrtle Beach State Park, T. F. Barbie, Jr., Supt., Myrtle Beach, S. C.

Oconee State Park, James W. Ray, Supt., Walhalla, S. C.

Paris Mountain State Park, Ed. H. Miller, Supt., Greenville, S. C.

\*Pleasant Ridge State Park, LeRoy Smith, Ranger, Cleveland, S. C.

\*Poinsett State Park, F. Marion Dwight, Supt., Wedgefield, S. C.

Rivers Bridge State Park, E. B. Mobley, Supt., Ehrhardt, S. C.

Santee State Park, G. B. LaBoon, Supt., Santee, S. C.

Sesqui-Centennial State Park, Marshall D. Holder, Supt., Columbia, S. C.

Table Rock State Park, E. W. Cooler, Jr., Supt., Pickens, S. C.

Colleton Wayside Park, Willard Risher, Caretaker, Canadys, S. C.

---

\* Includes area for Negroes.

### State Park Advisory Committee

Mrs. Bradley Morrah, Sr.

212 Overbrook Road

Greenville, S. C.

Mrs. R. K. Wise

1709 Hollywood Drive

Columbia, S. C.

Mrs. Jack Bryant

Orangeburg, S. C.

Dr. V. F. Platt

Conway, S. C.

Mr. Wayne Freeman

c/o Greenville Piedmont

Greenville, S. C.

Hon. William C. Johnston

City Hall

Anderson, S. C.

Mr. Tom Moore Craig

Montgomery Bldg.

Spartanburg, S. C.

Mr. Harry R. E. Hampton

c/o The State

Stadium Road

Columbia, S. C.

Mr. J. D. Carroll

Lexington, S. C.

Mr. Harold Petit

Box 952

Charleston, S. C.

Mr. Cecil McDaniel

Beaufort, S. C.

Mr. Bennett Moore

Cheraw, S. C.

## **DIVISION OF FORESTRY**

### **Branch of Administration**

E. B. Price, Assistant State Forester

C. H. Nelson, Head, Fiscal and Accounting

Delford F. Furney, Head, Property and Supply

Virginia S. Holmes, Head, Personnel and Office Services

Warehouse, Sumter, S. C.

J. P. Watson, Warehouseman

### **Branch of Information and Education**

Walter T. Ahearn, Assistant State Forester

Claude F. Barden, Information and Education Assistant

Nelson L. Peach, Information and Education Assistant

Sign and Woodworking Shop, Sumter, S. C.

Olin M. Ballentine, Foreman

### **Branch of Forest Management**

E. C. Pickens, Assistant State Forester

A. A. Lehocky, Management Assistant

Howard R. Scott, Management Assistant

E. L. Middleswart, Management Assistant

Sand Hills State Forest, Patrick, S. C.

Randolph B. Lee, Director

Manchester State Forest, Wedgefield, S. C.

C. W. Nuite, Director

Horace L. Tilghman Nursery, Wedgefield, S. C.

L. M. Staley, Nurseryman

Piedmont Nursery, Pickens, S. C.

David D. Brown, Nurseryman

### **Branch of Forest Fire Control**

John R. Tiller, Assistant State Forester

J. T. Hance, Fire Control Assistant

John M. Shirer, Fire Control Assistant

John R. McLees, Fire Control Engineer

J. M. Geddings, Communications Engineer-Telephone

R. M. Littlejohn, Communications Engineer-Radio

Equipment and Repair Shop, Sumter, S. C.

O. P. Woodward, Supervising Mechanic



### District Offices

Chauncey R. Nichols, District Forester, Camden, S. C.

R. B. Rhett, Forester, Camden, S. C.

W. O. Morgan, District Ranger, Camden, S. C.

D. R. Young, Forestry Aide, Camden, S. C.

(Camden District includes counties of: Chesterfield, Kershaw, Lancaster, Lee, Richland, and Sumter)

Alvin E. Kunz, District Forester, Florence, S. C.

John R. Allison, Forester, Conway, S. C.

Robert N. McCombs, Forester, Florence, S. C.

Fred W. Watson, Jr., District Ranger, Florence, S. C.

Malcolm B. Wright, Forestry Aide, Florence, S. C.

(Florence District includes counties of: Darlington, Dillon, Florence, Horry, Marion, and Marlboro)

Hugh M. Westbury, District Forester, Kingstree, S. C.

Fred W. Horn, Forester, Kingstree, S. C.

John R. Grubbs, District Ranger, Kingstree, S. C.

James Richard Todd, Forestry Aide, Kingstree, S. C.

(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown, and Williamsburg)

John E. Graham, District Forester, Newberry, S. C.

Donald W. Horton, Forester, Newberry, S. C.

Wilbur H. Reames, Forester, Newberry, S. C.

Clifton T. Carter, Timber Marker, Chester, S. C.

Melton Wall, District Ranger, Newberry, S. C.

Walter W. Senn, Forestry Aide, Newberry, S. C.

(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry, and Saluda)

Marvin T. Gaffney, District Forester, Orangeburg, S. C.

Chas. C. Rountree, Jr., Forester, Orangeburg, S. C.

Adrian Lee Pardue, District Ranger, Aiken, S. C.

George E. Lindsey, Jr., Forestry Aide, Orangeburg, S. C.

(Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington, and Orangeburg)

W. M. Lindsey, District Forester, Spartanburg, S. C.  
 Ralph W. Evans, Forester, Pickens, S. C.  
 J. Harlan McLees, Forester, Spartanburg, S. C.  
 Legare M. Duke, Forester, Spartanburg, S. C.  
 Chas. E. Turpin, District Ranger, Spartanburg, S. C.  
 William B. Lawrence, Jr., Forestry Aide, Spartanburg, S. C.  
 (Spartanburg District includes counties of: Anderson,  
 Cherokee, Greenville, Oconee, Pickens, Spartanburg,  
 Union, and York)

Boris Hurlbutt, District Forester, Walterboro, S. C.  
 Paul B. Carson, Forester, Walterboro, S. C.  
 Arthur P. Jervy, Forester, Walterboro, S. C.  
 E. H. Benton, District Ranger, Walterboro, S. C.  
 Hampton C. Durr, Forestry Aide, Walterboro, S. C.  
 (Walterboro District includes counties of: Beaufort, Char-  
 leston, Colleton, Dorchester, Hampton, and Jasper)

### **Protection Units**

Abbeville Unit Ranger, Charlie Shaw, Lowndesville, S. C.  
 Aiken Unit Ranger, J. Ramie Yonce, Aiken, S. C.  
 Allendale Unit Ranger, W. W. Brunson, Allendale, S. C.  
 Anderson Unit Ranger, John E. Embler, Anderson, S. C.  
 Bamberg Unit Ranger, P. H. Cave, Olar, S. C.  
 Barnwell Unit Ranger, W. R. Moore, Barnwell, S. C.  
 Beaufort Unit Ranger, W. Heyward Graves, Beaufort, S. C.  
 Berkeley Unit Ranger, Harold McCoy, Bonneau, S. C.  
 Calhoun Unit Ranger, Hampie F. Ott, St. Matthews, S. C.  
 Charleston Unit Ranger, K. W. Leland, Charleston, S. C.  
 Cherokee Unit Ranger, B. T. White, Gaffney, S. C.  
 Chester Unit Ranger, J. Gill Simpson, Chester, S. C.  
 Chesterfield Unit Ranger, W. M. Smith, Chesterfield, S. C.  
 Clarendon Unit Ranger, Elliott E. Rose, Manning, S. C.  
 Colleton Unit Ranger, Glenn B. Britt, Walterboro, S. C.  
 Darlington Unit Ranger, Alton Yarborough, Darlington, S. C.  
 Dillon Unit Ranger, Ernest S. Oliver, Dillon, S. C.  
 Dorchester Unit Ranger, Carlisle Haskell Durr, St. George, S. C.  
 Edgefield Unit Ranger, S. G. Reel, Edgefield, S. C.  
 Fairfield Unit Ranger, R. E. Patrick, Winnsboro, S. C.  
 Florence Unit Ranger, Hugh Cusaac, Florence, S. C.  
 Georgetown Unit Ranger, Laurin T. Sessions, Georgetown, S. C.



Greenville Unit Ranger, G. G. Paris, Greenville, S. C.  
 Greenwood Unit Ranger, James C. Smith, Jr., Greenwood, S. C.  
 Hampton Unit Ranger, J. D. Peeples, Early Branch, S. C.  
 Horry Unit Ranger, W. E. Watts, Conway, S. C.  
 Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland, S. C.  
 Kershaw Unit Ranger, L. E. Smith, Camden, S. C.  
 Lancaster Unit Ranger, A. A. Plyler, Lancaster, S. C.  
 Laurens Unit Ranger, Thos. F. Hill, Laurens, S. C.  
 Lee Unit Ranger, E. A. Hall, Bishopville, S. C.  
 Lexington Unit Ranger, V. S. Bickley, Lexington, S. C.  
 Marion Unit Ranger, Hoyt Collins, Marion, S. C.  
 Marlboro Unit Ranger, B. T. Clark, Bennettsville, S. C.  
 McCormick Unit Ranger, G. L. Sharpton, McCormick, S. C.  
 Newberry Unit Ranger, Marvin E. Wilson, Newberry, S. C.  
 Oconee Unit Ranger, D. O. Morgan, Walhalla, S. C.  
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg, S. C.  
 Pickens Unit Ranger, C. H. Gravely, Pickens, S. C.  
 Richland Unit Ranger, T. W. Cooper, Columbia, S. C.  
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda, S. C.  
 Spartanburg Unit Ranger, Milton E. McMillan, Spartanburg,  
 S. C.  
 Sumter Unit Ranger, L. G. Cabbage, Sumter, S. C.  
 Union Unit Ranger, James G. Long, Union, S. C.  
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree, S. C.  
 York Unit Ranger, E. G. Foster, York, S. C.

**Forestry Board Members****1956-57****Abbeville—**

Mr. W. L. Bowman, Rt. 3, Box 232, Iva, S. C.  
Mr. J. M. Kirkpatrick, RFD, Donalds, S. C.  
Mr. Sam W. Sherard, RFD No. 3, Abbeville, S. C.  
Mr. John C. Gilliam, Calhoun Falls, S. C.  
Mr. Reid Ashley, Rt. 2, Iva, S. C.

**Aiken—**

Mr. George Wilson, Bath, S. C.  
Mr. Grady McElmurray, Rt. 4, N. Augusta, S. C.  
Mr. J. C. Jones, RFD No. 4, Aiken, S. C.  
Mr. George Townes, Jr., Aiken, S. C.  
Mr. K. C. Byars, Windsor, S. C.

**Allendale—**

Mr. Locke V. Simons, Allendale, S. C.  
Mr. Joseph I. Chapman, Luray, S. C.  
Mr. W. B. Manuel, Fairfax, S. C.  
Mr. J. V. Spigener, Sr., Allendale, S. C.  
Mr. Frank H. Aldrich, Allendale, S. C.

**Anderson—**

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Mr. J. P. Bond, Rt. 3, Iva, S. C.  
Mr. John W. Merritt, Jr., Rt. 3, Easley, S. C.  
Mr. I. Fleet McClain, Anderson, S. C.  
Mr. W. J. Prater, Rt. 1, Townville, S. C.

**Bamberg—**

Mr. Jack C. Kirkland, Bamberg, S. C.  
Mr. Herbert Rhoad, Rt. 1, Branchville, S. C.  
Mr. John A. Turner, Denmark, S. C.  
Mr. W. F. Martin, Bamberg, S. C.  
Mr. Harold Kearse, Olar, S. C.



**Barnwell—**

Mr. W. E. Anderson, P. O. Box 393, Williston, S. C.  
 Mr. S. G. Lowe, Blackville, S. C.  
 Mr. Dean Rountree, Marlboro St., Barnwell, S. C.  
 Mr. Charles G. Youngblood, Box 114, Barnwell, S. C.  
 Mr. Ansel Still, Hilda, S. C.

**Beaufort—**

Mr. W. A. Campbell, Sheldon, S. C.  
 Mr. J. J. McNulta, Jr., Seabrook, S. C.  
 Mr. Charles Ulmer, Jr., Bluffton, S. C.  
 Mr. Ernie Bell, Bluffton, S. C.  
 Mr. R. G. Mitchell, Beaufort, S. C.

**Berkeley—**

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 Mr. D. L. Bradwell, Huger, S. C.  
 Mr. Algie H. Kennedy, Moncks Corner, S. C.  
 Mr. Charles Marion, Pineville, S. C.  
 Mr. Herbert Cross, Cross, S. C.

**Calhoun—**

Mr. Raymond Hill, Gaston, S. C.  
 Mr. J. T. Pearlstine, St. Matthews, S. C.  
 Mr. W. G. Peterkin, Ft. Motte, S. C.  
 Mr. J. Mack Zeagler, Lone Star, S. C.  
 Mr. Joe M. Rast, Elloree, S. C.

**Charleston—**

Mr. Hugh Belser, Awendaw, S. C.  
 Mr. DeWitt King, Sr., 92 Broad St., Charleston, S. C.  
 Mr. W. J. Newton, Yonge's Island, S. C.  
 Mr. John F. Sosnowski, Wadmalaw Island, S. C.  
 Mr. J. B. Leland, Mt. Pleasant, S. C.

**Cherokee—**

Mr. W. A. Gettys, Gaffney, S. C.  
 Mr. W. Joe MacArthur, Gaffney, S. C.  
 Mr. W. T. Hollifield, Kings Creek, S. C.  
 Mr. C. F. Blackwell, Gaffney, S. C.  
 Mr. Grady G. Turner, Gaffney, S. C.

**Chester—**

Mr. Clyde C. Cornwell, Rt. 3, Chester, S. C.  
 Mr. Boyd Westbrook, Edgemoor, S. C.  
 Mr. Jas. E. Anderson, Richburg, S. C.  
 Dr. James Land, Chester, S. C.  
 Mr. J. Harper Gwinn, Blackstock, S. C.

**Chesterfield—**

Mr. Lonnie W. McLain, Patrick, S. C.  
 Mr. Walker B. Miles, Rt. 1, Mt. Croghan, S. C.  
 Mr. Clyde K. Laney, Cheraw, S. C.  
 Mr. J. Monroe McManus, Pageland, S. C.  
 Mr. W. Clyde Hendricks, Chesterfield, S. C.

**Clarendon—**

Mr. E. G. Stukes, Davis Station, S. C.  
 Mr. L. E. Brailsford, Summerton, S. C.  
 Mr. Douglas McFaddin, New Zion, S. C.  
 Mr. G. T. Floyd, Manning, S. C.  
 Mr. B. G. Alderman, Alcolu, S. C.

**Colleton—**

Mr. H. M. Kinsey, Walterboro, S. C.  
 Mr. M. D. Hamilton, Islandton, S. C.  
 Mr. E. A. Boynton, Jr., Green Pond, S. C.  
 Mr. M. P. Howell, RFD, Walterboro, S. C.  
 Mr. S. A. Cooler, Walterboro, S. C.

**Darlington—**

Mr. D. Carl Cook, Hartsville, S. C.  
 Mr. Roland Warr, Rt. 3, Darlington, S. C.  
 Mr. H. K. Segars, Hartsville, S. C.  
 Mr. John H. Kissah, Rt. 2, McBee, S. C.  
 Mr. Edward Flowers, Rt. 3, Hartsville, S. C.

**Dillon—**

Mr. H. N. Cousar, Latta, S. C.  
 Mr. James R. C. Calhoun, Dillon, S. C.  
 Mr. D. L. McInnis, Rt. 1, Little Rock, S. C.  
 Mr. Tracy D. Rogers, Rt. 1, Lake View, S. C.  
 Mr. J. T. Squires, Latta, S. C.



**Edgefield—**

Mr. R. C. Bledsoe, Rt. 3, Edgefield, S. C.  
 Mr. Sam Slade, Edgefield, S. C.  
 Mr. H. Frank Cooper, RFD 3, Augusta, Ga.  
 Mr. Wm. D. Herlong, Johnston, S. C.  
 Mr. W. Frank West, Modoc, S. C.

**Fairfield—**

Mr. John McFadden, Ridgeway, S. C.  
 Mr. Jas. B. Frazier, Jr., Box 243, West Columbia, S. C.  
 Mr. Henry Johnston, Winnsboro, S. C.  
 Mr. W. T. Glenn, Jenkinsville, S. C.  
 Mr. Reid Long, Strother, S. C.

**Florence—**

Mr. D. L. Brown, 341 Greenway Dr., Florence, S. C.  
 Mr. Buck Poston, Pamplico, S. C.  
 Mr. Jas. H. McElveen, Rt. 3, Timmons ville, S. C.  
 Mr. J. W. McLendon, Florence, S. C.  
 Mr. W. D. Boling, Pamplico, S. C.

**Georgetown—**

Mr. D. D. Porter, Rt. 1, Georgetown, S. C.  
 Mr. Richard L. Allston, Pawleys Island, S. C.  
 Mr. H. H. Flickinger, Georgetown, S. C.  
 Mr. L. T. Easley, Georgetown, S. C.  
 Mr. J. T. Maynard, Georgetown, S. C.

**Greenville—**

Mr. S. B. Huff, Piedmont, S. C.  
 Mr. G. Dewey Butler, Travelers Rest, S. C.  
 Mr. Ansel Alewine, Taylors, S. C.  
 Mr. M. L. Jarrard, Cleveland, S. C.  
 Mr. J. H. Kellett, Rt. 3, Belton, S. C.

**Greenwood—**

Mr. A. C. Byrd, c/o Abney Mills, Greenwood, S. C.  
 Mr. J. McD. Kinard, Ninety Six, S. C.  
 Mr. Eldred S. Tinsley, Hodges, S. C.  
 Mr. John Bowen, Troy, S. C.  
 Mr. E. W. Milford, Greenwood, S. C.

**Hampton—**

Mr. R. C. Deloach, Furman, S. C.  
 Mr. Howard P. Rhodes, Estill, S. C.  
 Mr. Lloyd Rivers, Hampton, S. C.  
 Mr. Sidney Linto, Box 191, Estill, S. C.  
 Mr. Vernon C. Sauls, Hampton, S. C.

**Horry—**

Mr. Lee Outlaw, Rt. 1, Myrtle Beach, S. C.  
 Mr. T. A. Smart, Rt. 2, Conway, S. C.  
 Mr. E. Craig Wall, Conway, S. C.  
 Mr. Fred Lancaster, Tabor City, N. C.  
 Mr. Hicks Huggins, Rt. 4, Nichols, S. C.

**Jasper—**

Mr. J. Ivey Wells, Coosawhatchie, S. C.  
 Mr. George Roberts, Pineland, S. C.  
 Mr. B. J. Perry, Ridgeland, S. C.  
 Mr. J. Hoyt Langford, Ridgeland, S. C.  
 Mr. Wallace Goethe, Tillman, S. C.

**Kershaw—**

Mr. John Bowers, Kershaw, S. C.  
 Mr. John Dan McLaurin, Bethune, S. C.  
 Mr. Eugene T. Pearce, Camden, S. C.  
 Mr. Richard W. Lloyd, 1707 Lyttleton St., Camden, S. C.  
 Mr. C. W. Wooten, Blaney, S. C.

**Lancaster—**

Mr. Harold Richardson, Rt. 1, Lancaster, S. C.  
 Mr. Carl W. Mullis, Lancaster, S. C.  
 Mr. W. G. Hance, Heath Springs, S. C.  
 Mr. Charlie V. Morris, RFD, Lancaster, S. C.

**Laurens—**

Mr. J. Y. Martin, Ware Shoals, S. C.  
 Mr. J. T. Hollingsworth, Cross Hill, S. C.  
 Mr. Tan M. Ray, Clinton, S. C.  
 Mr. Elmore B. Bramlett, RFD, Laurens, S. C.  
 Mr. Allen Marler, RFD, Fountain Inn, S. C.



**Lee—**

Mr. J. Andrew Harker, Atkins, S. C.  
 Mr. E. L. Joyner, RFD, Bishopville, S. C.  
 Mr. Clifton Atkinson, St. Charles, S. C.  
 Mr. W. P. Baskin, Jr., Bishopville, S. C.  
 Mr. Carl Thomas, RFD, Lamar, S. C.

**Lexington—**

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 Mr. Berley V. Shealy, Leesville, S. C.  
 Mr. Preston G. Freshley, Rt. 2, Columbia, S. C.  
 Mr. L. O. Rast, Swansea, S. C.  
 Mr. J. D. Carroll, Lexington, S. C.

**Marion—**

Mr. J. C. King, Marion, S. C.  
 Mr. B. B. Baker, Centenary, S. C.  
 Mr. A. M. Flowers, Marion, S. C.  
 Mr. T. C. Atkinson, Rt. 1, Mullins, S. C.  
 Mr. A. H. Turbeville, Mullins, S. C.

**Marlboro—**

Mr. R. M. Pegues, Wallace, S. C.  
 Mr. C. D. Napier, Blenheim, S. C.  
 Mr. J. Richard Bryant, Rt. 1, Clio, S. C.  
 Mr. Brooks Usher, Bennettsville, S. C.  
 Mr. Colin McLaurin, Bennettsville, S. C.

**McCormick—**

Mr. W. L. White, Rt. 2, McCormick, S. C.  
 Mr. J. C. Winn, Plum Branch, S. C.  
 Mr. J. M. Hemminger, Willington, S. C.  
 Mr. G. J. Sanders, McCormick, S. C.  
 Mr. J. T. Creswell, Rt. 3, McCormick, S. C.

**Newberry—**

Mr. Chas. C. Wallace, Rt. 3, Newberry, S. C.  
 Mr. H. M. Hentz, Box 181, Newberry, S. C.  
 Mr. A. W. Murray, Newberry, S. C.  
 Mr. T. J. Abrams, Whitmire, S. C.  
 Mr. Cecil Berly, Pomaria, S. C.

**Oconee—**

Mr. W. T. McClure, Jr., Westminster, S. C.  
 Mr. R. A. Reeves, Seneca, S. C.  
 Mr. B. W. Alexander, Rt. 1, Westminster, S. C.  
 Mr. Oscar Wigington, Salem, S. C.  
 Mr. W. H. Pelfrey, Rt. 2, Seneca, S. C.

**Orangeburg—**

Mr. J. Nat Miley, Branchville, S. C.  
 Mr. M. H. Whetsell, Southern Nat'l. Bank, Orangeburg, S. C.  
 Mr. L. E. Miller, Holly Hill, S. C.  
 Mr. Martin Cope, Cope, S. C.  
 Mr. George H. Priester, Neeses, S. C.

**Pickens—**

Mr. L. P. Thomas, Rt. 5, Box 237, Easley, S. C.  
 Mr. J. H. Bolding, Rt. 2, Pickens, S. C.  
 Mr. T. J. Mitchell, Pickens, S. C.  
 Mr. T. A. Bowen, Pickens, S. C.  
 Mr. W. M. Ponder, Dacusville, S. C.

**Richland—**

Mr. Lonnie B. Nelson, Rt. 3, Columbia, S. C.  
 Mr. J. Roger Wilson, Blythewood, S. C.  
 Mr. E. B. Wingard, Rt. 2, Columbia, S. C.  
 Mr. L. W. Conder, Box 693, Columbia, S. C.  
 Mr. J. M. Bates, Wateree, S. C.

**Saluda—**

Mr. S. E. Amick, RFD, Leesville, S. C.  
 Mr. J. Claude Wheeler, Saluda, S. C.  
 Mr. R. L. Hipp, Saluda, S. C.  
 Mr. A. R. Able, Saluda, S. C.  
 Mr. M. H. Kemp, Johnston, S. C.

**Spartanburg—**

Mr. W. J. Martin, P. O. Bldg., Spartanburg, S. C.  
 Mr. Claude Bishop, Inman, S. C.  
 Mr. Sam Snoddy, Wellford, S. C.  
 Mr. Paul Hendrix, Duncan, S. C.  
 Mr. Tom Craig, Moore, S. C.



**Sumter—**

Mr. Hugh McLaurin, Jr., Wedgefield, S. C.  
 Mr. Curtis Edens, Dalzell, S. C.  
 Mr. W. R. Keels, Pinewood, S. C.  
 Mr. Albert Moore, Rt. 1, Olanta, S. C.  
 Mr. M. S. Boykin, N. Salem Ave., Sumter, S. C.

**Union—**

Mr. Harold Fowler, Rt. 4, Union, S. C.  
 Mr. Jas. A. Berry, Union, S. C.  
 Mr. T. Stokes Adams, Union, S. C.  
 Mr. A. T. Inabinet, Buffalo, S. C.  
 Mr. C. Lynell Gregory, Rt. 1, Buffalo, S. C.

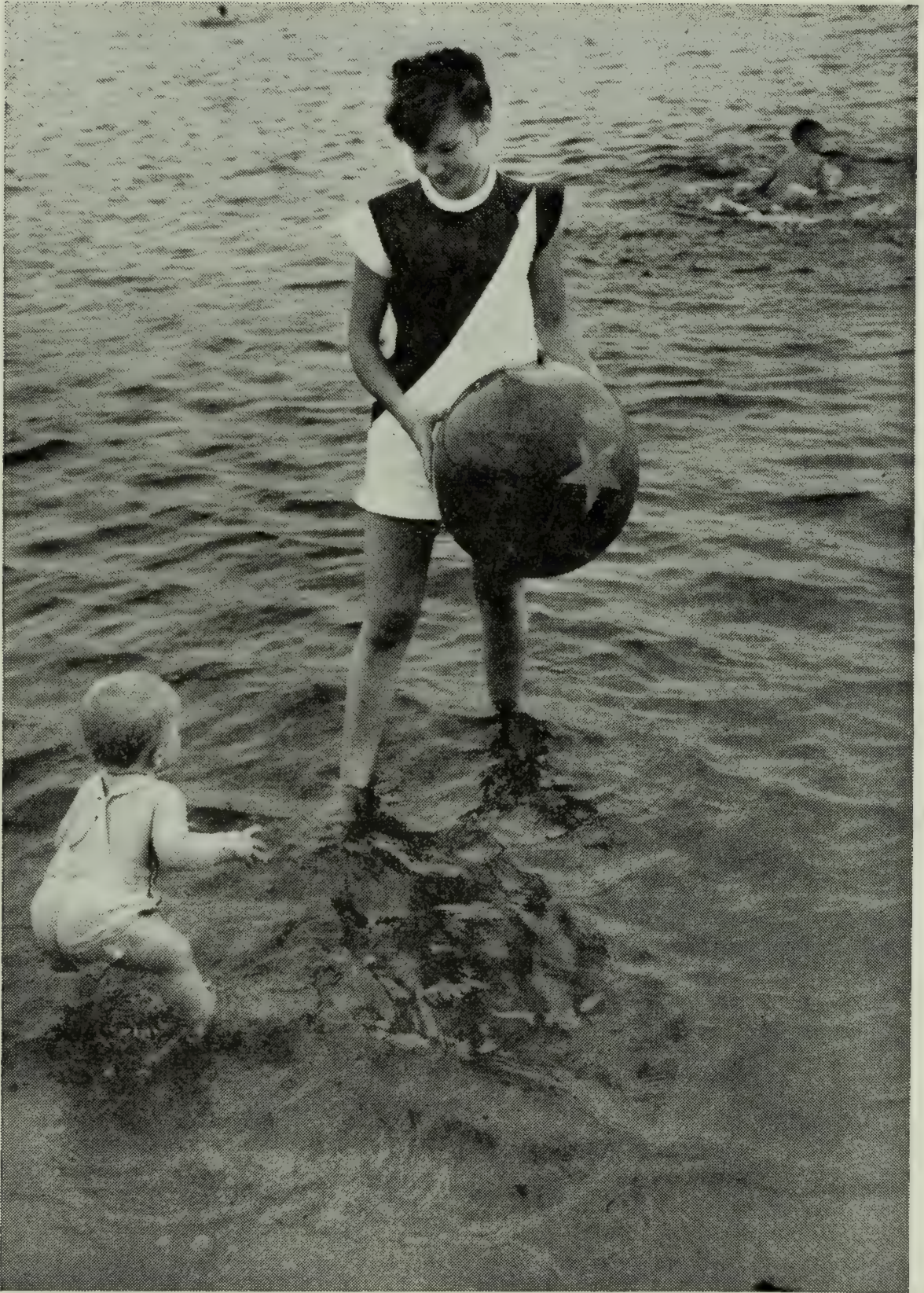
**Williamsburg—**

Mr. J. W. Waldron, Nesmith, S. C.  
 Mr. P. D. Bishop, Kingstree, S. C.  
 Mr. T. E. Salters, Salters, S. C.  
 Mr. Jack McFaddin, Cades, S. C.  
 Mr. T. V. Ligon, Lanes, S. C.

**York—**

Mr. Oliver C. Faris, Catawba, S. C.  
 Mr. Sewell Hartness, Sharon, S. C.  
 Mr. Oscar Hammond, Fort Mill, S. C.  
 Mr. R. S. Flanagan, Bowling Green, S. C.  
 Mr. John M. Foster, York, S. C.





South Carolina's forest resources, wisely used, can help provide good clear water, attractive and healthful recreation areas, and abundant and valuable forest products for both present and future generations of South Carolinians.



## SUMMARY

### Forest Fire Protection:

Relatively low fire occurrence was experienced in South Carolina during the fiscal year 1956-57. The vast majority of fires and area burned occurred during the winter and early spring months, which is considered normal for the state. Eighty-two per cent of the total number of fires and ninety per cent of the total area burned occurred during the months of December, January, February, March, and April.

The 3,883 fires which occurred during the year represent the second lowest number recorded since statewide fire protection was established in 1946. The lowest number of fires ever experienced for the entire state was 3,149 during fiscal year 1947-48. During the fiscal year covered by this report, 46,777.8 acres of timberland were burned by wildfires. This figure represents the lowest acreage burned figure ever recorded under statewide protection. Smokers, debris burning, and incendiarism continued as the major causes of all illegal fires.

Total amount of rainfall for the fiscal year was almost identical to the previous year, however it was distributed more evenly through the months; and, accordingly, no serious buildup of fire danger was experienced. These favorable weather conditions contributed much to the good fire record for the year, however due recognition must be given to the fact that fire control personnel are more experienced in fire suppression tactics and are better qualified to handle the job; more and better fire suppression tools and mechanized equipment are available; the recently completed two-way radio communication system is quite effective; and, generally, timberland owners are more fire conscious and are cooperating with the Commission's efforts to reduce fire occurrence and acreage burned to a minimum.

During the last session of the General Assembly, funds were made available for the assignment of two State Law Enforcement Agents to forest fire law enforcement activities. The Commission anticipates that the assistance of these two agents in training and working with regular fire control personnel will materially decrease the large number of incendiary fires which are experienced each year.

**Forest Management:**

The Commission of Forestry continued to direct the major part of their management program to assisting small, private, woodland owners with their management problems. There was no appreciable change in the type of ownership of the woodland areas in the state. The larger industrial ownerships control approximately twenty per cent (20%) ; all types of public ownership control seven per cent (7%) and the small ownerships control the remaining seventy three per cent (73%) of the woodland areas. According to the most recent information available, most of the public ownerships, industrial and larger land ownerships are handling their woodland areas as they should be for maximum forest production. The greatest problem still exists with the small woodland ownerships who control seventy three per cent (73%) of the woodland areas.

There was a heavy loss of technical forestry personnel during the year and this turnover, coupled with an increased work load due to the advent of the Soil Bank Program, seriously handicapped the woodland management service. As of July 1, 1957, most of these vacancies had been filled and the program was beginning to pick up speed.

During the year Commission Foresters made woodland examinations on 1,148 separate woodland areas covering approximately 163,479 acres. A total of 11, 365,157 board feet of sawtimber was marked and 6,008 cords of pulpwood were marked. Commission Foresters listed 109 landowners referred to Consulting Foresters and 92 landowners referred to Industrial Foresters. These cases consisted primarily of those that were large tracts and would have taken too long for Commission Foresters to complete the job.

Landowners continued to receive excellent prices for selectively marked sawtimber and pulpwood. Average sawtimber prices reported were higher than for any previous year. An intensive study of factors relating to sawtimber prices is now being made by the Southeastern Forest Experiment Station in cooperation with the S. C. State Commission of Forestry. The purpose of this study is to determine what effect quality, amount of sawtimber per acre, size of trees, distance to nearest town, and many other factors might have on the price received. Prices for selectively marked timber average considerably higher than



those for timber that was sold without the benefit of a forester's estimate. It is expected that by June 30, 1958, considerably more information will be available regarding the factors that effect sawtimber prices.

The requests for management service for South Carolina landowners reached an all-time high in 1956-57. With the loss and turn-over of personnel, the Commission was unable to service some requests without considerable delay, up to three months in some instances. At the end of the year the outlook was much better and, if personnel can be stabilized, it is expected that the forest management assistance program to small, private owners can reach many more landowners and cover considerably more acreage than in past years.

The Commission's nursery program received a tremendous boost with the advent of the Soil Bank Conservation Reserve Program. A second tree seedling nursery, the Piedmont Nursery, was constructed and began operations during the year. The State Legislature had authorized the purchase and establishment of this nursery, capable of producing approximately twenty (20) million trees annually, and the Soil Bank Program made funds available to increase these facilities to approximately thirty (30) million trees annually. In addition, Soil Bank Funds were made available to further improve and expand the Tilghman Nursery at Wedgefield in an effort to maintain production at this nursery at about thirty-five (35) million trees. A third nursery, the Coastal Nursery near St. George, South Carolina, was authorized and funds provided through the Soil Bank Program for development. This Coastal Nursery will be developed and seed will be planted in the spring of 1958.

With the demand for seedlings increasing much faster than the ability of the Commission to expand its nursery facilities, the Tilghman Nursery at Wedgefield planted all available space in an effort to produce as many trees as possible. A total of 55,383,600 seedlings were produced. This production was by far the highest on record by the Commission of Forestry. In spite of this record production, the Commission was able to supply only approximately one-half of the seedlings requested.

The estimated production for 1957-58 from the two nurseries in operation is sixty (60) million seedlings. It is anticipated that the following year, 1958-59, with three nurseries in oper-

ation, the Commission's production will be one hundred and ten (110) million seedlings.

The Federal Government, through the Soil Bank Conservation Reserve program provided funds to employ seven "Forestry Aides" to assist with tree distribution, cone collection, planting site inspections, demonstration planting and other related nursery activities. With the assistance of these men it is expected that a higher percentage of field survival may be obtained for seedlings planted in the state.

The State Commission of Forestry continued to operate four state forests. The combined area of these state forests represents about one per cent (1%) of the total forest area in the state. Experimental and demonstration plantings, other forest management experiments and other activities were continued on these forests. Since about forty per cent (40%) of the total land area in the state forests is still in an unproductive state, major emphasis continued to be directed towards reforesting this non-productive area. Six hundred seventy (670) acres of scrub oak land were cleared during the year and have been, or will be, planted to pine this next season. During the past nine years an accumulated total of some 5,000 acres of state forest lands have been cleared of worthless scrub oak and converted to pine stands.

There have been no announcements of major industries locating in South Carolina; however, the two new pulpwood industries that announced their plans a year ago began some construction activities and also began acquiring land within the state. There were a number of smaller industries that began operating in the state; however, these were probably offset by some of the small industries that ceased operations. The last few months of the fiscal year show a definite slow-down in the demand for sawtimber and pulpwood, however, prices had not declined appreciably.

The U. S. Forest Service completed plans and obtained the necessary funds to begin a re-survey of the state's forestry resources on July 1, 1957. It is expected that field work on this re-survey will be completed by May or June, 1958, and that up-to-date information concerning growth, drain, standing timber volumes, etc., for the state of South Carolina will be available by late 1958.



### **Information and Education:**

The information and education approach to forestry and state park problems and opportunities in South Carolina is the sum total of many people and many activities. It is a ranger or a warden talking to a landowner, to a class of school children, or to a volunteer offering help on a going woods fire. It is a district forester meeting with local citizens about the woods fire problem in a community, or conducting a tree planting demonstration for those ordering trees for the first time. It is a forester conducting a timber thinning demonstration in the woods with a class of vocational agriculture students, or presenting a program on conservation at a garden club or civic club meeting. It is a towerman talking to a visitor, explaining the fundamentals of forest fire prevention and forest fire control activities. It is a state park superintendent operating an area of a thousand acres or more and serving as host to ten thousand people on a hot summer day, or helping a school teacher unfold the mysteries of a nature trail to a group of children. It is a landowner understanding that one tree should be cut because it is overmature, while another should be left because it is growing wood at the rate of six to sixteen percent return on his investment. It is any South Carolinian realizing that even a little fire kills little trees regardless of why or how the fire started.

Yes, forestry and state park information and activities involve many things and many people. Press releases, photographs, pamphlets, talks, field demonstrations, films, radio and television programs are some of the tools used in carrying out the mandate given the Commission to inform the people of South Carolina on forestry and state park matters.

South Carolinians who are made aware of the seriousness of the problems that face our state in the fields of state parks and the conservation of our natural resources will realize that by taking positive action, these problems can be turned into opportunities.

As South Carolinians, as individuals, realize that each of us has some stake and responsibility in the present and the future of our forests and state parks, we find that there are things each one of us can do to turn these problems into opportunities for us, our families, our children, our community, and our State.

**State Parks:**

The importance of the service rendered South Carolina by its system of 22 state parks can be visualized by the fact that again in the fiscal year over three million visitors used them for health relaxation, and recreation. Attendance has increased six-fold in the past decade, and totals indicate that approximately three million visitors enjoy the state parks year after year.

Additional facilities have been added to all the parks as a result of the \$300,000 bond issue, and park visitors are enjoying more improvements than in any period since the parks began operating twenty years ago.

The need for adequate maintenance of these increased facilities is evident in the light of the conservation of human resources. Mental health and stability of families are direct results of wholesome outdoor recreation in the naturalistic setting of South Carolina's State Parks. With increased leisure on the one hand, and the tension of our times on the other, State Park values cannot be reckoned in dollars and cents.

**Administration:**

No additional State appropriated funds for salary increases or adjustments were provided and as a result, our losses of both technical and other personnel continued at an excessive rate. A total of 56 employees resigned during the year of which 54% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and Park program \$2,646,638.34 and of this total the division of Forestry expended \$2,122,129.12 and the division of State Parks \$524,509.22 (see financial sheet for detailed explanation of funds available and expenditures made). State appropriated funds amounted to \$1,179,100 for the division of Forestry and \$326,600 for the division of State Parks. In addition to the appropriated funds for the Forestry Division, legislative authority was granted to borrow \$195,000 to establish and operate a forest tree nursery in the piedmont section of the state.



### Recommendations:

1. Salary increases to all existing personnel, with adjustments to bring certain positions into line with duties and responsibilities.

2. Intensification of the forest fire prevention education program to reduce fire occurrence.

3. Intensify the fire law enforcement program in cooperation with the State Law Enforcement Division.

4. Secure full support and cooperation of magistrates, judges, and solicitors in connection with prosecution of violations of the State Fire Laws.

5. Strengthen forest fire laws by:

a. Amending Section 16-318 of the 1952 Code by increasing the penalties.

b. Passage of an Act to provide that responsible persons be liable for the expense incurred by the State in suppressing fires which start on or spread to lands of another.

c. Passage of an Act to provide penalties for starting fires by disposing of inflammable materials.

d. Passage of statewide Notification of Intent to Burn Law.

6. Provide additional medium and heavy fire suppression units to increase efficiency of suppression and to minimize damage and loss from forest fires.

7. Increased use of airplane patrol on days of high fire occurrence and low visibility.

8. Employment of all equipment operators on a full-time basis.

9. More adequate funds for:

a. Normal replacement of trucks, tractors, plows, and other tools and equipment.

b. Maintenance of all improvements, facilities, tools, and equipment.

c. Construction of adequate maintenance facilities for fire control equipment.

10. Construction of dwellings at all dispatching towers which do not presently have houses.

11. Begin installation of sanitary facilities at all lookout tower residences.

12. Conduct such forest fire protection research as is necessary to more adequate and efficient prediction, detection, suppression, and control of forest fires.

13. Study the advantages and disadvantages of a rainfall stimulation and long-range weather forecasting program.

14. Provide adequate funds for the operation of the existing three forest tree nurseries, and to step up production in the 1958 calendar year to at least 125 million tree seedlings.

15. A stepped-up program to improve state-owned forest lands to bring these areas into full production.

16. Provide adequate authority and funds for the control of forest insects and diseases.

17. Adequate funds for operation of 22 state parks to keep pace with the greatly increased public use, and to provide for adequate maintenance of buildings, installations, and equipment.

18. Funds to continue the development of Croft State Park. This 7,000-acre reserve had its development halted and is not yet prepared to serve the thousands of potential patrons in this heavily-populated industrial section of South Carolina. Two annual appropriations of approximately \$55,000 and \$30,000 each for capital improvements are needed to place the park in its proper operational position.

19. The areas comprising the State Park system are generally adequate to serve the people of South Carolina with the following exceptions:

a. Additional state parks for use by Negroes are needed—one in the Charleston area, another in the vicinity of Columbia, and one each on the Clark Hill and Hartwell impoundments.

b. Next in order for state parks for whites should include one in the area centering around Williamsburg County, one near Anderson on the Hartwell Dam project and one on the Clarks



Hill Reservoir near McCormick should follow in a third priority position.

20. That the Legislature continue to defend the state park system against all encroachments, including threats from organizations or individuals tending to break down the segregated use of parks. To preserve for this and future generations this extraordinary natural resource valued at more than \$6,000,000. To keep intact the 22 state recreation areas, embracing 46,000 acres of natural woodlands and waters, for if once abandoned, this resource could probably never be recovered.

21. Intensify the Commission's over-all educational program to: develop a public awareness of the need for forest conservation; prevent forest fires from occurring; encourage intelligent timber harvesting to yield a greater production per acre per year; and encourage the planting of idle land to trees. Such a program of informing the people of the state would also help guard against insect and disease attack. It would acquaint landowners with ways to eliminate weed species of trees to permit better yields of higher valued products. It would teach a more intelligent use of state park facilities to the end that people would better enjoy, appreciate, develop, conserve and wisely use the natural beauty and resources of South Carolina.





What's in a tree? An increment boring showing the growth rate of a tree is used by Commission foresters as a basis for recommendations to landowners for increasing timber growth through better forest management practices.



# FOREST MANAGEMENT

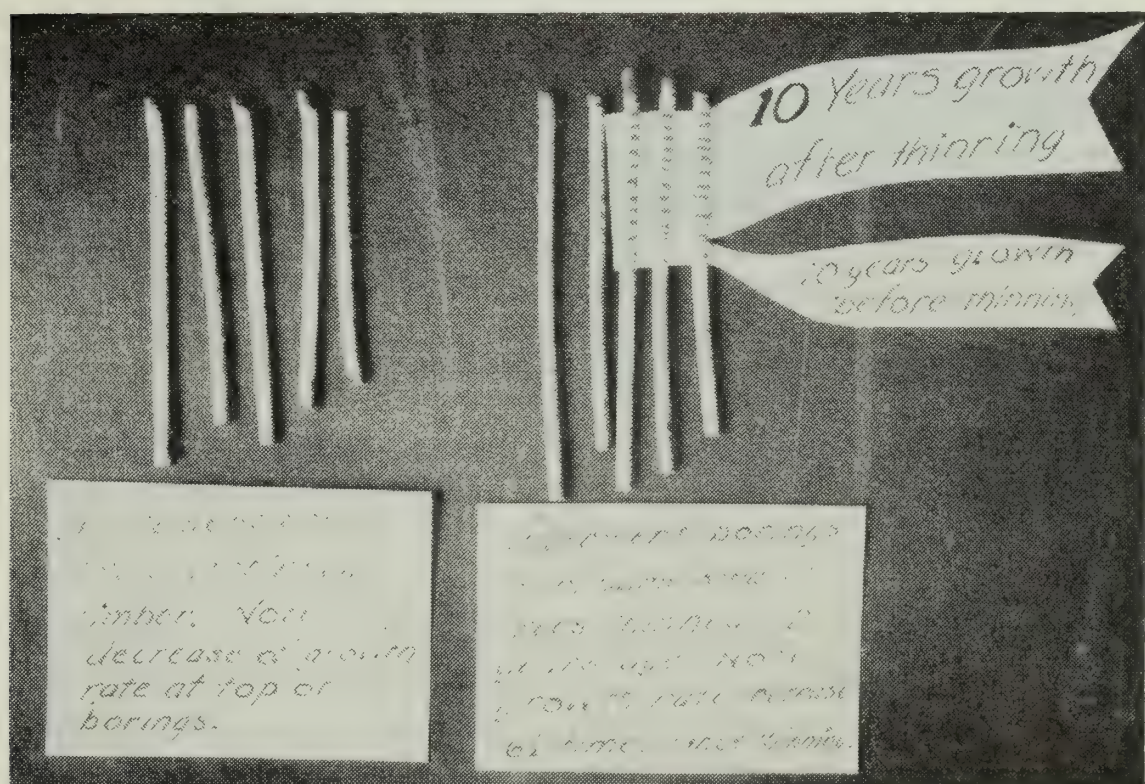
## Management Assistance:

The major emphasis of the Forest Management Branch activities was again directed towards assisting private landowners with their woodland management problems.

The State Commission of Forestry and the Clemson College Extension Service co-operate in providing foresters to help landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, and reforestation measures needed.

In cases where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish the landowner a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is fifty cents (\$.50) per thousand board feet or



thirteen cents (\$.13) per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a distinctly technical measure and involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seed bed preparation, and the control of the "Brown Spot" disease in longleaf pine. Recommendations for the use of prescribed fire are made only after a very careful analysis, with the landowners, of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

Timber Stand Improvement recommendations are also included in the woodland examination writeup. This would include measures necessary to replace the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees.

Cooperative work with the Agriculture Conservation Committee was intensified during 1956-57 and more landowners are placing lands in this program where approved by Commission Foresters.

In addition to the on-the-ground service as noted below, a large number of requests for general information were answered by the central and district offices' management staffs. These requests included information on scrub oak control, timber stand survey information, industry location data, etc. Commission Foresters handled an estimated 1,250 calls regarding insect and disease control and made more than 450 on-the-ground inspections for insects and diseases. Recommendations for control were given.

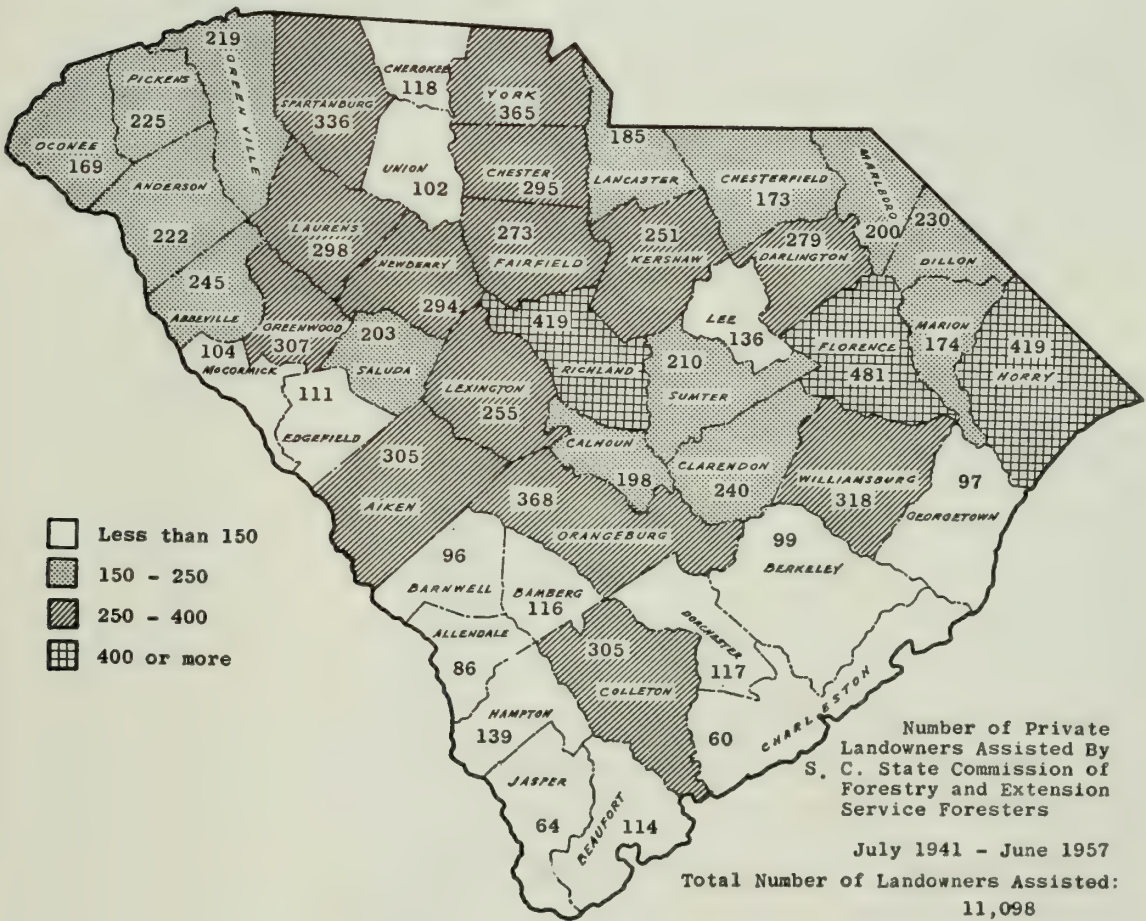
Commission Foresters will concentrate more of their program towards assisting landowners with brush control problems in an effort to bring more unproductive areas into production of timber crops.

During the year, Commission Foresters made 1,148 woodland examinations on 163,479 acres of forest land, and selectively marked a total of 11,365,157 board feet and 6,008 cords for 304 landowners on 8,248 acres of forest land. The following table



shows the continuous increase in woodland examinations and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature.

Commission Foresters and Extension Foresters again followed the policy of referring all of the larger jobs and some of the smaller jobs to Consulting Foresters and Industry Foresters wherever practical. Our records indicate 109 jobs referred to Consulting Foresters where properties were examined by Commission or Extension Foresters and it is estimated that as many more jobs were referred direct to Consulting Foresters where original contact was made by Commission or Extension personnel. Ninety two jobs were referred to Industrial Foresters.



SUMMARY BY YEARS

YEAR	EXAMINATIONS		MARKING SERVICE			
	Number of Landowners	Woodland Acreage	Number of Landowners	Woodland Acreage	Board Feet Timber	Cords Pulp
1941-42 .....	213	37,500	84	14,792	8,271,202	....
1942-43 .....	145	62,204	59	8,769	13,851,707	862
1943-44 .....	170	85,300	121	15,407	25,515,145	1,231
1944-45 .....	309	161,412	108	15,359	16,033,407	639
1945-56 .....	256	80,800	78	12,591	15,292,532	546
1946-47 .....	445	105,896	203	18,408	24,735,103	4,237
1947-48 .....	545	148,577	208	13,477	19,788,388	3,500.3
1948-49 .....	706	126,600	235	13,768	22,009,336	4,429
1949-50 .....	880	163,334	242	8,427	13,283,940	3,385.3
1950-51 .....	998	173,057	339	14,275	19,634,153	3,896
1951-52 .....	919	170,948	288	11,931	18,031,822	3,088.6
1952-53 .....	931	142,054	315	12,109	16,332,715	3,935
1953-54 .....	945	143,347	331	8,864	12,264,641	8,467
1954-55 .....	1,166	184,754	399	9,477	13,875,377	5,162
1955-56 .....	1,322	191,143	393	10,973	16,246,795	9,167
1956-57 .....	1,148	163,479	304	8,248	11,365,157	6,008
Totals.....	11,098	2,140,405	3,707	196,875	266,531,420	58,553.2

Prices received from marked sawtimber for the past five years are shown in the following table:

TIMBER SALES SUMMARY FOR SOUTH CAROLINA  
FIVE YEAR PERIOD

Fiscal Year	No. Sales On Record	Weighted Average Price Received Per M Bd. Ft.
1952-53 .....	100	\$35.53
1953-54 .....	54	31.53
1954-55 .....	86	32.50
1955-56 .....	104	35.91
1956-57 .....	60	37.37

Timber prices remained steady throughout the year; however, there was a considerable drop in the demand for timber during the last half of the fiscal year. High quality timber continued to bring premium prices. The average price paid for marked sawtimber was higher than that recorded for any previous year. There was still a large number of owners who sold timber without having a forester estimate or mark the timber and prices for these boundary sales were considerably less than the price received for the marked sales. Reliable figures are not available



for very many of these boundary sales; however, it is estimated that only about one-half of the value is being received by owners who sell timber by the boundary.

Pulpwood prices remained steady, and increased in some areas in the state. The demand for pulpwood also dropped sharply during the last few months of the fiscal year. There is some indication that the demand for pulpwood is picking up as mid-summer approaches. Stumpage prices for pulpwood of up to \$8.06 per cord were received with a considerable number of sales selling for \$6.00 per cord. Most prices ranged between \$5.00 and \$6.00 with upper Piedmont prices climbing to only \$4.00 to \$5.00 per cord.

The demand for poles was about the same as for 1955-56 with very little change in pole prices. In certain sections of the state, demand for small poles and fence posts continued to be steady or improved.

The Forest Management Branch combined with the Information and Education Branch to hold a three-day training school at Burnt Gin for all technical personnel. The Central Office staff, with some assistance from U. S. Forest Service Specialists, were instructors in this school. The I & E Branch directed their efforts towards better programs that would reach the small, private landowner.

#### LUMBER AND PULPWOOD PRODUCTION BY YEARS

1942	-----	1,079,351 M bd. ft.	-----	946,000 Cords
1943	-----	984,773 M bd. ft.	-----	985,000 Cords
1944	-----	850,748 M bd. ft.	-----	1,053,000 Cords
1945	-----	723,667 M bd. ft.	-----	877,500 Cords
1946	-----	1,005,700 M bd. ft.	-----	955,700 Cords
1947	-----	871,014 M bd. ft.	-----	948,388 Cords
1948	-----	798,700 M bd. ft.	-----	1,108,523 Cords
1949	-----	1,002,000 M bd. ft.	-----	1,012,180 Cords
1950	-----	997,000 M bd. ft.	-----	1,182,413 Cords
1951	-----	1,100,000 M bd. ft.	-----	1,251,045 Cords
1952	-----	958,000 M bd. ft.	-----	1,275,698 Cords
1953	-----	921,000 M bd. ft.	-----	1,446,157 Cords
1954	-----	950,000 M bd. ft. est.	-----	1,330,888 Cords
1955	-----	1,000,000 M bd. ft. est.	-----	1,513,313 Cords
1956	-----	900,000 M bd. ft. est.	-----	1,806,571 Cords

The production of sawtimber was probably not quite up to 1949 and 1955 average. Final figures on this production are not available as yet. The production of pulpwood was up considerably over 1955. In fact, a new high in pulpwood production was reached. With the expansion programs at the existing mills and with at least two new pulp mills to be constructed within the near future in South Carolina, the demand for pulpwood will probably increase considerably within the next few years. The use of hardwood for pulp almost doubled in 1955.

It is still difficult and, quite probably will remain difficult, for the sawmill operators to find large, high quality logs. The average size log now being delivered to the sawmills is smaller than in the past years. The trend in management is towards shorter rotations and it is probable that most landowners will not attempt to grow large, top quality logs, but will harvest their timber on a shorter rotation for pulpwood and small sawtimber. The objective of the Forestry Commission's landowner assistance program is to help landowners to grow larger and better quality poles, pulpwood and sawtimber through proper management practices, with the goal of obtaining the highest financial returns for the landowner.

There was very little change during the year of the number of forest products industries operating in the state. Some small sawmills have stopped or work only part-time since the demand for timber eased off. It is anticipated that most of these mills will resume full scale operations when demand picks up.

There was a continued increase on the part of forest industries to manage their own land properly. Most of the companies who own considerable acreages are now hiring either full or part time foresters, in an effort to keep their woodlands producing the largest possible volume of higher quality products.

The pulp companies continued to furnish the services of their Conservation Foresters to assist landowners with proper thinning of pulpwood. It is the responsibility of these foresters to help sell private owners on the idea of "sustained yield" in managing their woodlands. According to estimates received from the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.



Commission Foresters in the field offices and in the central offices field checked approximately 450 separate properties for insect and disease damage. Recommendations were given the owners as to what treatments were necessary to control or check the spread of the disease or insects. More than 800 telephone calls were answered regarding insect or disease where no field check was necessary. There were no epidemics of disease or insects during the year; however, the Ips and Southern Pine Beetle attacks killed many trees during the summer and fall of 1956. A check for Oak Wilt was continued but none was located in South Carolina. Clemson College has been given authority and directions to handle any control work necessary for forest diseases and insects. Commission Foresters will cooperate with Clemson in the work.

### REFORESTATION

A total of 55,753,600 seedlings were produced and distributed from the Horace L. Tilghman Nursery at Wedgefield. Distribution by species was as follows:

Loblolly Pine .....	16,471,150
Slash Pine .....	38,496,800
Longleaf Pine .....	504,650
Arizona Cypress .....	270,500
Red Cedar .....	10,500

It was reported that 4,248,000 seedlings were brought into South Carolina by industries who operate nurseries in adjoining states. In addition, there were almost ten (10) million trees planted on the A. E. C. project in Aiken County with seedlings from Federal nurseries. The total planting in South Carolina last year including trees from all sources was almost 70,000,000 trees. Orders were received last year for well in excess of 100,000,000 seedlings. It was necessary that a fifty per cent (50%) reduction in all orders be made and even further reductions made in loblolly pine orders. No orders were accepted that were received after September 30, 1956.

Again, the Wedgefield Nursery was planted for an over-production in order to supply as many trees as possible to land-owners in the state. This heavy over-production added to three years of maximum production from this nursery has badly de-

pleted the soil fertility and organic content. An effort will be made to rest part of this nursery since, by next February, the Commission will have three nurseries in operation. The Commission will have available about 60,000,000 trees for distribution in 1957-58.

The Piedmont Nursery was placed in operation during the fiscal year and a crop of trees will be ready for distribution next planting season. A third nursery is now being developed and will produce a crop of trees by 1958-59. Individual statements concerning progress of these nurseries is included on the following pages.

Tables 10 and 11 in the Appendix show a record of seedlings distributed by counties and class of ownership. Also, Table 12 shows accumulated acres planted by counties and acres in need of planting. The following table shows the number of seedlings planted in South Carolina by years:

1928-29	142,000
1929-30	148,000
1930-31	986,000
1931-32	976,000
1932-33	996,000
1933-34	1,031,000
1934-35	7,529,000
1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600
1947-48	11,356,990
1948-49	30,338,775
1949-50	29,501,955
1950-51	20,615,315
1951-52	16,619,000



*1952-53	32,246,298
*1953-54	42,852,314
*1954-55	45,182,255
*1955-56	42,931,755
*1956-57	69,658,736
<b>TOTAL</b>	<b>484,538,166</b>

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\*Includes trees planted on the A. E. C. area supplied from Federal Nurseries.

The procurement of seed to produce the required seedlings continued to be one of the greatest problems confronting the nursery program. The cone crop for 1957 was almost a complete failure, consequently, no appreciable amount of seed was collected. After planting for the 1957-58 production at the Piedmont and Wedgefield Nurseries, a supply of about 9,000 pounds of loblolly seed remained. This amount of seed would only meet about two thirds of the requirements for loblolly production needed next year and, of course, all of the slash, white pine and other miscellaneous seed must be collected or purchased prior to February of 1958. Approximately 20,000 pounds of seed will be needed to sow for the 1957-58 crop and a minimum of 10,000 additional pounds should be collected if possible in order to build up a carry over supply to provide against seed crop failures.

### TILGHMAN NURSERY

This was the tenth year of nursery operations at Tilghman Nursery located at Wedgefield, S. C. Including this year's record production of 55,383,600, a total of 296,055,560 seedlings has been produced and distributed. The average cost including depreciation of capital improvements for this ten year period was \$2.66 per thousand seedlings. Add to this the cost of overhead and the cost of field personnel who assist with the distribution program, cone collection and demonstrational planting, the cost per thousand would approximate \$3.00. The Wedgefield Nursery, with its physical plant, land area and other facilities, is actually geared for a production of some 30,000,000 to 35,000,000 seedlings annually. Some expansion of physical plant was made during the year with the assistance of Soil Bank funds. During the past four years this nursery has produced 31,000,000 trees in excess of that which should have been produced with the land

area devoted to tree production. That has resulted in considerable depletion of soil fertility and organic content and an accelerated program to restore this organic content and fertility was begun during the year. It will probably require some two or three years to restore many of these areas to a good state of fertility.

A modern seed extracting plant to handle cones for all of the Commission's seed collection programs is now being constructed at the Wedgefield Nursery. Funds for this construction were obtained through the Soil Bank program. Bids for construction of this cone kiln were let in May of 1957.

### PIEDMONT NURSERY

The title to this property was obtained in July of 1956 and construction work began immediately. Two dwellings, an equipment shed and a packing shed with refrigeration facilities were completed. Sixty acres of nursery bed space were leveled and put into shape for tree production. An irrigation system to cover this sixty acres was installed and is in operation. Approximately thirty acres were developed and ready for planting by spring of 1957. A crop of seedlings which were inventoried at about



The Commission's nursery facilities were increased greatly with the development of the Piedmont Forest Tree Nursery in upper Pickens County. The new nursery will help meet the increasing demand by landowners for forest tree seedlings.



18,000,000 trees will be distributed from this nursery this coming season.

Personnel consisting of a nurseryman, assistant nurseryman, mechanic-foreman and necessary laborers were obtained to operate this nursery.

It is anticipated that production at this nursery can be increased to about 30,000,000 trees annually after all improvements are made.

### **COASTAL NURSERY**

In May and June of 1957, the Commission of Forestry was advised that Soil Bank funds were available to establish this nursery. By June 30, 1957, one hundred (100) acres of land had been acquired under long term lease and contracts accepted for the construction of two dwellings, an equipment shed, packing shed and most of the motor vehicle equipment needed to operate this nursery. The development of the nursery is now well underway and it is anticipated that the area will be in production for next year. Seed will be sown in February and March 1958 for a 40,000,000 to 45,000,000 production.

All funds for the establishment of this nursery including operations up through the sowing of the seed will be provided for from the Soil Bank Program.

### **COOPERATIVE FOREST MANAGEMENT**

During the fiscal year nine cooperative forest management projects were operating in the state. All of the projects were not manned for the entire twelve month period. There were a number of resignations of technical foresters during the year and replacements were not obtainable until near the end of the fiscal year. Due to the turn-over in personnel on these projects and an increase in requests for forest management assistance, many landowners who requested service were unable to obtain assistance without waiting for a three to six months period. Beginning July 1, 1957, some additional projects are planned if technical foresters can be employed. A summary of work accomplished by these cooperative forest management foresters is included with the data for each district.

## WATERSHED PROJECTS

The Pilot Watershed Project on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the Federal Forest Service and the Soil Conservation Service. A total of 637,000 seedlings were planted on 730 acres of badly eroded and gullied land within the project boundaries. A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover could be established. In addition to this work, the Project Forester assisted nineteen landowners in properly marking and selling sawtimber and pulpwood. A total of 993,000 board feet and 839 cords of pulpwood were marked for these nineteen owners. In addition, recommendations for planting, brush control and other measures needed on some of the woodland areas were given to many landowners.

A second watershed project area was approved for operation during the year. This area is in Oconee County and includes the Coneross Creek Drainage Area. The twelve Mile Creek Project Forester will also assume responsibility for operating this Coneross Project with some additional assistance from district office personnel. Federal watershed funds were made available for the purpose of a \$6,000.00 fire protection unit for this area. Tree planting and other erosion control measures will begin in 1957-58 fiscal year. It is quite probable that one or more additional watershed areas will be approved for detailed work during 1957-58. It is anticipated that the necessary technical assistance needed to operate these watershed projects will be provided by district office personnel.

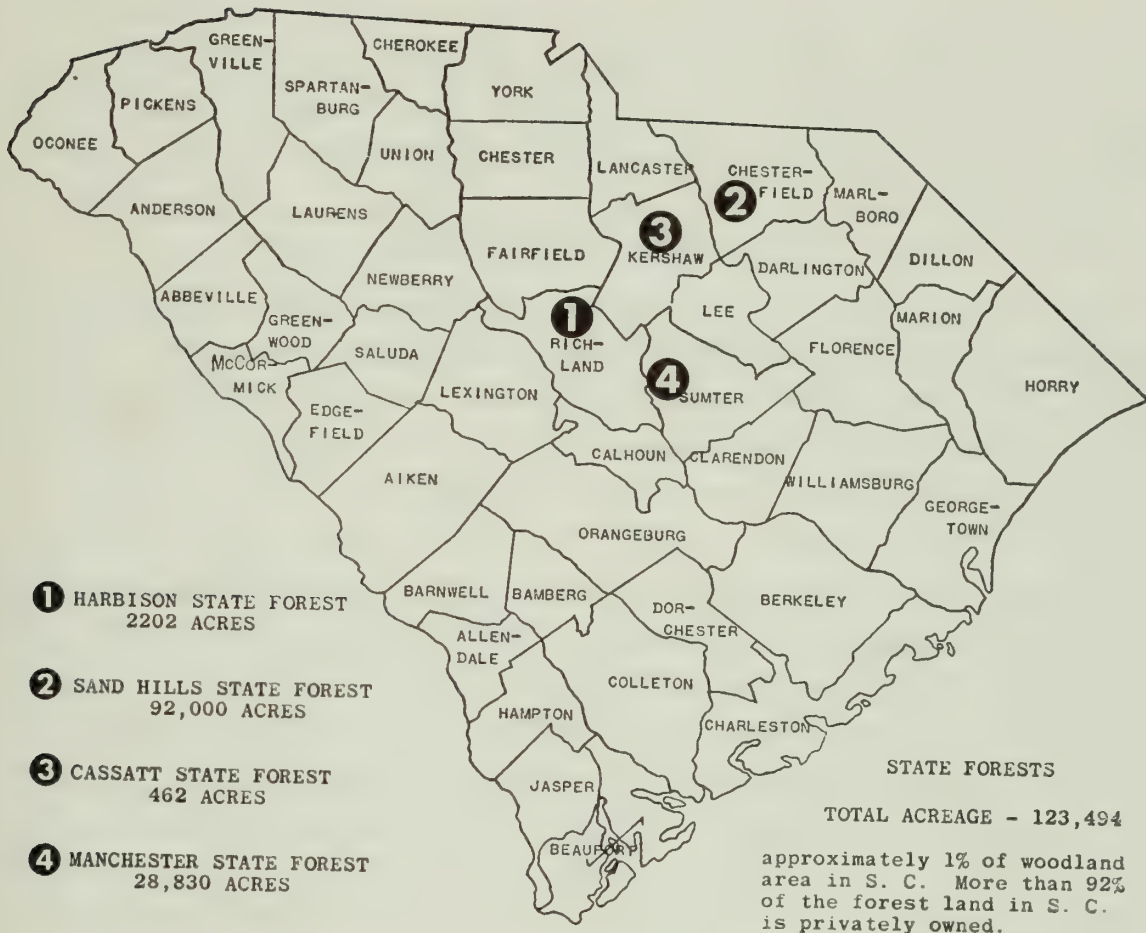
## STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

Cassatt State Forest.....	462 acres
Harbison State Forest.....	2,202 acres
Manchester State Forest.....	28,830 acres
Sand Hills State Forest.....	92,000 acres
TOTAL .....	123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut-over and generally mis-used. The primary effort since acquisition by the state has been





directed towards building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective is the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops in order to reduce the competition so that pine will survive and grow. Approximately 2,800 acres of scrub oak land have been cleared and replanted to pine through fiscal year 1955-56. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both rate and quality of the remaining timber.

Detailed reports of activities on each of the State Forests follows:

### CASSATT STATE FOREST

The State Forest in Kershaw County comprises 462 acres composed primarily of scrub oak land and old fields. All of the old

fields have been planted to slash pine. As soon as funds are available there are about 300 acres of scrub oak that should be cleared and the areas planted to pine. When this is done, all of the 462 acres would then be in timber production.

### **HARBISON STATE FOREST**

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County Fire Control Organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. One fire occurred on the forest during the year which burned one quarter acre.

Most of the Harbison area is well stocked and in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the twelve years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest, all operating costs and returned a substantial amount to the state treasury. This year's timber sales consisted of 254,151 board feet which sold for \$11,437.00; 167.12 cords of pulpwood which sold for \$994.63; one slab pile which sold for \$25.00, making a grand total in receipts of \$12,463.63. The worthless scrub oak brush was cut and poisoned along a two hundred foot strip fronting on highway 76.

### **MANCHESTER STATE FOREST**

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state, effective June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat, and to get all records of transfer completed. A boundary survey was completed for about one third of the boundary lines during the year. Approximately one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak and reclaiming it for pine production.



**Fire Protection:**

Only four fires occurred which burned 52.3 acres during the year. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining the area in the prevention, pre-suppression and suppression of forest fires. This fire record is one of the best ever posted for Manchester State Forest.

Approximately 300 miles of firebreaks were maintained or constructed during the year.

**Fish and Wildlife:**

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which work closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

**Agriculture:**

Thirty tenants rented 312 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, approximately 344 acres of newly cleared scrub oak land were rented for one season to watermelon growers.

**Road and Truck Trails:**

During the year 39.5 miles of truck trails were machined and washes filled, a number of bridges repaired and diversion ditches cleaned.

**Management Plan:**

Due to a rapid turn-over in field personnel, the central office staff did not have sufficient time to complete the management plan for Manchester State Forest. The field work for this plan has been completed and the detailed plan itself will be made soon. The information obtained from the field survey is being

used at present to guide all improvement practices and timber cutting that is being done.

### **Tree Planting:**

A total of 286,000 trees were planted on the forest during the year. These included 284,500 slash pine and 1,500 red cedar. Practically all of the above plantings were made by machine in the brush-cut and cleared areas and only a few thousand were planted in old fields.

### **Forest Products Sold:**

Forest products sold during the year included the following:

Sawtimber (board feet) .....	325,246
Pulpwood (cords) .....	1,516.53
Posts (standard cords) .....	20.54

### **Telephone Lines:**

Eight miles of telephone lines in the forest system were brushed and maintained during the year. A number of breaks were repaired and general maintenance carried out to keep the telephone system in good working order.

### **Silvicultural Practices:**

Again, the major silvicultural activity was the conversion of woodland scrub oak areas to areas suitable for planting of pine. Since this brush clearing and plowing operation is a continuous one, there are some areas that had the brush removed in 1955-56 that were completed and plowed in 1956-57. Approximately 370 acres were cleared and plowed ready for renting to watermelon growers for one season. Listed below is a summary of activities in this work.

Brush cutting .....	565 acres
Brush piled and burned .....	370 acres
Plowed .....	370 acres

Desirable seedlings were released by cutting the overtopping, undesirable trees on a 95 acre area.



### **Maintenance and Repair:**

A large number of small maintenance jobs were completed on tenant houses and headquarters buildings. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair, except the roof on the equipment shed. It is planned to re-roof this building in 1957-58.

A D-7 Caterpillar tractor with Dozer blade and a special apparatus for plowing up scrub oak was purchased. This heavy equipment should speed up the Commission's activities in getting rid of scrub oak in preparation for planting pine. A Ford tractor, one two ton truck and one pick-up were traded and some repairs made to the TD-9 tractor.

### **Demonstrations and Meetings:**

The Manchester State Forest area was used for a training school for all technical personnel on two occasions. The summer meeting of the Appalachian Section of the Society of American Foresters also visited the area to observe experimental work that is under way on the forest. About one hundred foresters attended this Society Section meeting.

### **Shaw Air Force Base Lease:**

The U. S. Army Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until June 30, 1962. The State Forestry Commission will be paid \$3,074 per year for this lease.

Salvage operations following the large fire that occurred last year were completed and with prompt action in making this salvage, losses from pine beetles and other insects that usually follow fire, were held to a minimum.

## **SAND HILLS STATE FOREST**

Sand Hills State Forest, located in the scrub oak-long leaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State

Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95 year lease agreement.

Before the area was acquired by the government, it was heavily cut-over, badly burned and generally abused. As a result, major activities for the present and for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing of the forest stand. Almost half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultural objective at present.

### **Tree Planting:**

All planting was done by machine except for some experimental longleaf planting. All plantings were made in clearings. All of the old fields on this forest, except those being farmed, have now been planted to trees. A total of 220,000 slash pine and 100,000 longleaf pine was planted. A total of 13,115,500 seedlings has been planted on the property since 1935. Approximately two thirds of these plantings were successful.

### **Forest Products Harvested:**

The following products were harvested from the Sand Hill State Forest during the year:

Sawtimber	_____	11,269	bd. ft.
Pulpwood	_____	1,739.23	cords

The sawtimber cutting was made to salvage damage incurred by a tornado. Another small amount was pay received from timber cut by an adjoining landowner who unintentionally cut over the line.

Pulpwood was cut from planted stands that were in need of thinning. Some of the wood removed was used for fence posts; however, payment to the Forest was made on a cord basis regardless of the product made from the wood.

### **Fire Protection:**

During the year 27 fires burned 183.1 acres. This is the second best record since the forest was established in 1939, and a very



low fire loss for this type area. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield Unit, Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

A total of 112.5 miles of firebreaks was plowed on the forest.

### **Recreation:**

The sugar Loaf Mountain Recreation area for white people received heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing, but no swimming is allowed.

The Parks Division continued improvement work on Campbell's Pond, Negro State Park. This area received heavy use during the year. A more detailed report will be found in the Park Section of this report.

### **Fish and Wildlife:**

No hunting was allowed on the area during the year. Fishing is allowed without permits in Sexton's Pond. Sugar Loaf Mountain Lake and Campbell's Pond is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

### **Agricultural Lands:**

Fifteen tenants rent and farm 900 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

During the 1956 watermelon season, 200 acres of land were rented to watermelon growers following the clearing of scrub

oak from the area. Present plans are to continue to clear scrub oak lands and rent them one year to watermelon growers and then plant them to pine.

### **Roads and Truck Trails:**

During the year 70 miles of truck trails were graded, brushed out, and washes filled in. Two culverts were repaired and six timber bridges redecked. Forty-five diversion ditches were cleaned out.

### **Silvicultural Practices:**

A total of 200 acres of scrub oak was cleared with the brush cutter and/or cable, and plowed with the Athens plow.

A number of experimental plots have been established using various poisons and concentrations in an effort to determine the most practical method of eliminating scrub oak competition so that pine can become established.

Records were maintained on thinning plots established in 1950.

### **Maintenance and Repair:**

The Sugar Loaf Mountain Recreation area was maintained and all facilities in the area are in very good condition. The general condition of headquarters and director's residences is good; however, a number of the tenant houses are in need of considerable maintenance work.

Two new D-4 Caterpillar tractors, one of which is equipped with a dozer blade, were purchased during the year. This equipment will be used in the scrub oak clearing and conversion work. The equipment on hand on the forest is adequate to do the work that is planned; however, it will be necessary to trade and buy some new equipment in 1957-58.

### **Boundary Surveying:**

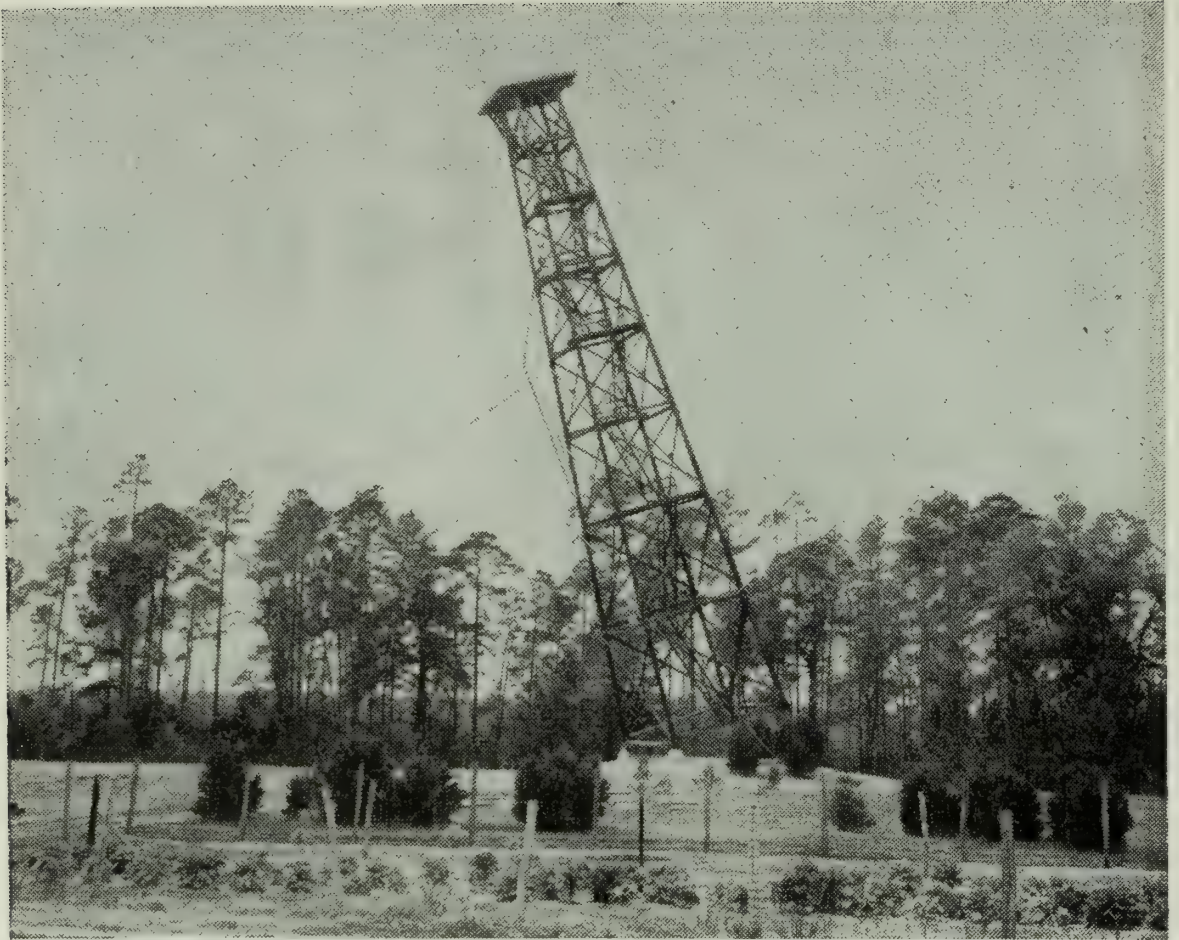
A Cadastral Engineer was sent by the Atlanta office of the U. S. Fish and Wildlife Service to continue work on boundary surveys for the forest; however, there are many more miles yet to be run to completely establish all boundaries. This surveying was done on an area where there was some dispute about the



location of the Sand Hills State Forest lines. More work is planned for July and August of 1957.

### **EXPERIMENTAL STUDIES**

A number of experiments were continued that were begun within the last three years. These experiments were established in cooperation with the Santee Branch of the Southeastern Forest Experiment Station. These experiments are being carried out in an effort to determine the best forest practices that are applicable to the Sand Hills conditions. A new study was begun in June of 1957 to analyze and determine slash pine growth rates on various soils on the Sand Hills area. These studies will be made in eight to twenty year old established slash pine plantings.



The old gave way for the new when six old wooden towers, declared unsafe for further operation, were replaced by steel towers. Here the old Rowesville Tower in Orangeburg County is shown on the way down. The new steel structure is shown in the background.



# FOREST FIRE PROTECTION

## INTRODUCTION

The State Commission of Forestry provides intensive forest fire protection to all timberland owners in South Carolina on a cooperative basis. Administration of all forest fire protection activities is supervised by the Central Fire Control Branch in Columbia. The state is subdivided into seven fire service districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district. The districts are divided into county units, all of which have fire control organizations which work directly with private landowners in the prevention and control of fires on their timberlands. Even though the Commission renders protection service whenever and wherever possible, the individual landowner is not relieved of the responsibility for fires on his property. There are some 11,300,008 acres of state and privately owned timberlands in South Carolina; and with the limited number of fire control personnel and equipment available, the overall job of fire protection in the state cannot be accomplished without the assistance of the landowners and the general public. In addition to the above total, the U. S. Forest Service protects some 587,361 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

### County Units:

The fire control personnel organized within each county unit represent the key individuals who work directly with timberland owners on forest fire control activities. Throughout the state, these organizations comprise some 46 unit rangers, 134 wardens, 54 tractor operators, and 137 towermen. In addition to the regular unit personnel listed above, some 13,495 volunteer personnel assisted the organization with the suppression of illegal forest fires during the year.

### County Forestry Boards:

The five-man County Forestry Board which serves in each county renders invaluable assistance in the promotion of fire protection activities, not only in their individual counties but

throughout the state. The board members are appointed by the Commission of Forestry on recommendation of the majority of the county legislative delegation. An annual meeting is held in July of each year to discuss and review fire protection activities in the county and to assist in the formulation of plans for the forthcoming year. All board members are kept informed of the various activities of the Commission of Forestry and are contacted periodically in connection with the work program. Many of the accomplishments in forest fire control are attributed directly to the efforts and support of the individual board members throughout the state.

### **State Advisory Committee of County Forestry Boards:**

A number of years ago the State Advisory Committee of County Forestry Boards was formed to serve in an advisory capacity to the State Commission of Forestry in all phases of the program. This Committee is comprised of one delegate from each of the County Forestry Boards. The Committee meets annually to review and discuss the activities of the Commission of Forestry and to make recommendations to the State Forester. The Budget Request which will be submitted to the State Legislature during the next session is thoroughly discussed with the Committee in an endeavor to provide ways and means for conducting an effective forestry program in South Carolina.

### **State Forests and Parks:**

State-owned forests and parks in South Carolina comprise approximately 169,574 acres. The individual Park Superintendents and State Forest Directors are responsible for the protection of timberlands on these areas in cooperation with the Branch of Forest Fire Control.

### **Cooperative Agreements with U. S. Forest Service:**

The U. S. Forest Service is responsible for the protection of the 587,361 acres of timberland within the national forest boundaries. The federal agency maintains its own fire control organization, equipment, and permanent improvements essential to the conduct of this work. However, the State Commission of Forestry and the U. S. Forest Service have an agreement whereby each



agency cooperates with the other in the reporting of fires outside of their area of jurisdiction and also with the suppression of fires on certain areas which extend along the boundary lines.

## **FIRE PROTECTION ACTIVITIES**

### **Training:**

Inasmuch as the fire protection activities conducted by the Fire Control Organization are varied and cover many phases of work, it is necessary that a continuous intensive training program be carried out. For this reason, the Fire Control Branch of the Commission of Forestry strives at all times to perfect a training program that will result in all fire control personnel being well trained.

During the fiscal year 1956-57, district-wide training meetings for all fire control personnel in the seven districts of the state were held. Some of the subjects covered at these district-wide meetings included safety and first aid, fire prevention, and fire control forms and reports.

In addition to the district-wide training meetings, regular district ranger training meetings were held in the districts with timely training being given the rangers.

In addition, each county unit holds a weekly meeting at which time the ranger gives some timely training. He decides in advance what training is needed and prepares the training in advance. These meetings are often attended by some member of the district office who helps with the instruction.

One of the best methods of training is individual, on-the-job training. This is one of the most important jobs of unit rangers and other supervisory personnel. Such training and instruction is continually carried on, resulting in improved performance of all phases of fire control activities.

### **Inspection:**

A complete unit inspection is made in each county each year. This inspection goes into great detail and covers every phase of fire control activity within a county unit. These inspections are welcomed by unit personnel. They point out the good as well as the bad, and their aim is to increase efficiency of the organization. After the inspection is made, unit rangers receive a





Regular inspection of all firefighting tools and equipment is an important part of the activities of Commission personnel. Preventive maintenance reduces costly repairs and keeps equipment ready for use at a moment's notice.

copy of the inspection report which they use as a guide to correct any deficiencies that might still exist within their unit. Many times such deficiencies are corrected on the spot at the time of the inspection. For the most part, the unit inspections are conducted by personnel of the district office with an occasional inspection being conducted by personnel of the central office.

Periodic inspection of all automotive equipment is carried out by three traveling mechanics operating out of the central shop and warehouse at Sumter. These traveling mechanics endeavor to keep all mechanized equipment in good operating condition and stress the importance of keeping the various units ready for routine and emergency calls at all times.

#### **Fire Control Progress Checks:**

Detailed district fire control progress checks are conducted periodically by the central fire control staff. During these fire control progress checks, all phases of the fire control program



are checked and discussed with the district personnel concerned. Following the inspection, a detailed report is written up and given to the district forester.

The fire control progress checks are invaluable to the district and central office staffs in analyzing the fire control program in the districts and initiating training and other corrective measures needed in carrying out the overall fire control program.

The fire control progress checks have contributed materially toward increasing the efficiency and progress of the fire control work throughout the state.

### **Law Enforcement:**

An attempt is made to carefully investigate all illegal forest fires that occur in the state in an effort to determine the responsibility of the fire. Where the state fire laws are violated and sufficient evidence is secured for prosecution, all violators are prosecuted. Securing sufficient evidence for prosecution is rather difficult in many fire law violations. The forest fire law enforcement program needs to be intensified throughout the state. With the assistance of the State Law Enforcement Division and other law enforcement agencies, the forest fire law enforcement program should be strengthened considerably in the future.

Continued cooperation of local magistrates and the acceptance of the fire law enforcement program by the general public is essential to a successful law enforcement program.

During the fiscal year 1956-57, a total of 180 persons were prosecuted for violation of the various state fire laws. Of this number, 177 were convicted.

The Burning Permit Law, now in force in nine counties, requires all persons to secure a permit from the county fire control organization or an authorized agent prior to burning brush, hedgerows, woodlands or fields during the period of October 15-May 15, inclusive. The Burning Notification Law is in effect in two counties in the state and requires all persons to notify the county fire control organization or an authorized agent prior to burning brush, hedgerows, woodlands or field during the period October 15-May 15, inclusive, except in Colleton County where the period runs from October 15-July 1, inclusive. The Burning Permit and Notification Laws are very beneficial to the county organizations as they furnish information to the personnel as to

the location and approximate time when burning is scheduled. The laws are also beneficial to the landowner as he receives instructions for safely burning the area he has to burn. The Burning Permit Law is in effect in Aiken, Orangeburg, Georgetown, Charleston, Greenville, Marlboro, Williamsburg, Horry, and Clarendon Counties. The Notification Law is in effect in Hampton and Colleton Counties.

During the fiscal year 1956-57, a total of 13,321 permits were issued in the state and a total of 2,690 notification receipts issued. During the year, 19 persons were prosecuted under the Permit Law and 13 prosecutions were made under the Notification Law. Only 17 fires were known to have escaped from the 13,321 permits issued, and only 4 fires were known to escape from the 2,690 notification receipts issued.

### **Fire Plans:**

All county unit organizations are furnished with a detailed forest fire control plan which outlines procedures for the control and operation of fire suppression activities. These unit plans are in the process of being revised to conform with current conditions and operating procedures.

In addition to the regular unit fire plans, a number of similar plans have been prepared for various landowners throughout the state who are desirous of maintaining adequate protection for their timberlands. These plans follow the same general outline as the unit fire plans, in that they outline the forest fire hazard conditions which exist and also measures necessary for adequate protection from wildfires.

### **Forestry Legislation:**

During the 1957 session of the General Assembly, the Legislature passed a joint resolution providing for the continuance of the Forest Fire Study Committee, broadening the powers of this Committee, and increasing the membership on the Committee. The Legislature increased the powers of the Committee to include matters pertaining to all forestry problems in the state and changed the name of the Committee from the Forest Fire Study Committee to the Forestry Study Committee. The membership of the Committee was increased to include the Chairman of the



Senate Committee on Fish, Game, and Forestry and the Chairman of the Committee on Agriculture and Conservation from the House of Representatives. The present membership of the Committee, in addition to the two members above, includes two members of the Senate appointed by the President of the Senate, two members of the House of Representatives appointed by the Speaker of the House, and five members appointed by the Governor, one each from citizens representing the following interests: forest landownership, forest industries, County Forestry Boards, Forestry Committee of the South Carolina Bankers Association, and the Conservation Committee of the State Chamber of Commerce.

The Legislature, during its 1957 session, also provided funds to the State Law Enforcement Division for the purpose of employing a special law enforcement agent to be assigned to forest fire law enforcement work throughout the state.

The 1957 Legislature also extended the period covered by the Burning Notification Law in Colleton County from May 15 to July 1, inclusive:

The Burning Notification Law in Clarendon County was changed by the Legislature from a Notification Law to a Burning Permit Law.

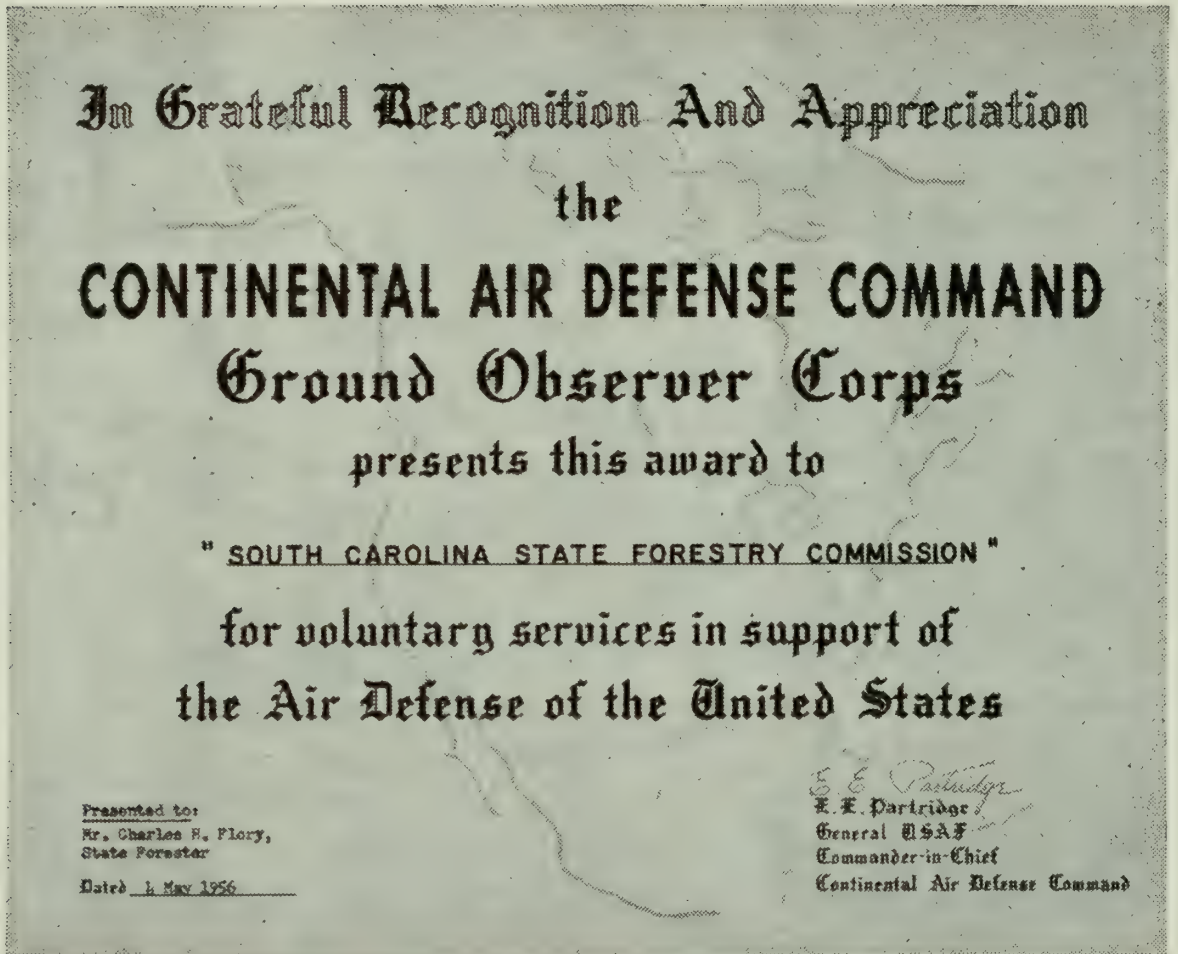
#### **Southern States Fire Control Conference:**

The Southern States Fire Control Chiefs held their annual meeting this fiscal year in Macon, Georgia. In addition to the Southern States Fire Chiefs and their assistants, the meeting was also attended by the various State Foresters, Radio Engineers, representatives of the U. S. Forest Service, and various private equipment concerns. The program was designed to better coordinate the activities of all individual states in an endeavor to facilitate mutual forest fire protection efforts.

### **IMPROVEMENTS, TOOLS AND EQUIPMENT**

#### **Lookout Towers:**

The Commission of Forestry operates 137 forest fire lookout towers in the state. During the year, six old wooden towers located at Rowesville, Neeses, and Holly Hill in Orangeburg County; Johns Island in Charleston County; Hartsville in Darlington County; and Lancaster in Lancaster County were replaced with



Towermen and other Commission personnel all over the state cooperate fully with the Continental Air Defense Command in observation and communication exercises.

new steel structures. The 1957 session of the General Assembly appropriated sufficient funds for the replacement of the remaining six wooden towers during the coming year. In addition to the state-operated towers, the U. S. Forest Service owns and operates a number of lookout units on the Sumter and Francis Marion National Forest. All towermen, both state and federal, cooperate with one another in spotting and locating fires which occur within their visual range.

#### **Tower Unit Buildings:**

Only limited progress was made during the year with the maintenance of tower unit dwellings and outbuildings owned by the Commission. Forestry personnel are capable and available to carry out all of the maintenance work; however, the program is hampered considerably due to lack of sufficient funds. These tower unit buildings are not equipped with modern sanitary facilities which are badly needed throughout the state.



## ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

134 Lookout Tower Units .....			\$2,942,503
46 Fire Danger Measurement Stations .....			3,450
332 Miles Telephone Line .....			99,600
Central Repair Shop and Warehouse System.....			150,000
Radio: 7 Remote Control Base Stations,			
60 watt .....	@ \$1,200	\$	8,400
1 Remote Control Base Station,			
60 watt .....	@ 1,800		1,800
1 Remote Control Base Station,			
250 watt .....	@ 3,000		3,000
1 Remote Control Base Station,			
100 watt .....	@ 1,500		1,500
25 Base Station Units,			
50 watt .....	@ 900		22,500
155 Base Station Units,			
10, 25, and 30 watt .....	@ 535		82,925
260 Mobile Units (Single			
Channel) .....	@ 425		110,500
6 Mobile Units (Dual			
Channel) .....	@ 450		2,700
5 Portable Units .....	@ 400		2,000
			235,325
TOTAL .....			\$3,430,878

### Equipment:

During the fiscal year, four additional light crawler tractors equipped with fire suppression plows and truck transports were purchased and assigned to county use. One new heavy suppression unit was purchased and assigned to the mountainous section of the state. Eight new ranger pickup trucks were purchased as replacements for old worn-out units. Three 1½-ton tractor transport trucks were purchased for replacement in the counties. Seven old light tractor suppression units were replaced with new crawler-type tractors during the year. Two new sedan delivery trucks were purchased for replacement of vehicles operated by one traveling mechanic and one radio technician.

# INVENTORY FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1957

	<i>Items</i>	<i>Values</i>
2307	Back Pack Pumps.....	\$ 35,534
5014	Fire Rakes .....	17,220
2669	Fire Swatters .....	10,656
323	Backfire Torches .....	6,600
9	Heavy Crawler Tractors .....	68,000
1	Medium Crawler Tractor .....	7,600
46	Light Crawler Tractors.....	128,800
7	Light Wheel-Type Tractors.....	14,000
10	Heavy Duty Plows.....	9,000
1	Medium Duty Plow.....	450
53	Light Duty Plows.....	16,600
1	1/4 Ton Jeep w/Plow.....	1,850
54	Light Equipment Transport Trucks.....	129,600
9	Truck Tractors, Heavy Duty.....	33,000
9	Equipment Transport Trailers.....	27,300
47	Ranger Pickup Trucks.....	98,230
7	Sedan Delivery Trucks.....	14,000
3	2-Ton Stakebody Trucks.....	6,000
10	1/2-Ton Pickup Trucks .....	17,000
1	300-gallon Tanker-Trailer w/Pump.....	1,200
1	Mobile Radio Trailer .....	2,500
TOTAL .....		\$ 645,140

## Equipment Maintenance Shop:

The Fire Control Branch operates a central repair shop at Sumter where heavy and specialized repairs are made to all fire control equipment. Three traveling mechanics, headquartering at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 394 complete field inspections of equipment and conducted 281 field repair jobs. The Commission of Forestry is in the process of completing a district repair shop at each of the seven



district headquarters. The heavy suppression unit operator-mechanics will be headquartered at the shop; and in addition to operating the heavy equipment on fires when necessary, will conduct an intensive automotive maintenance and repair program from these local headquarters.

The central shop personnel at Sumter made many repairs to automotive equipment owned by the Commission and manufactured numerous items necessary for field use. Some of the work handled by the mechanical force is listed below:

Major repairs were made to 54 light tractors, 7 heavy tractors, 69 light trucks, 52 heavy trucks, 20 light plows, 3 heavy plows, 1 light trailer, and 2 heavy trailers. Minor repairs were made to 24 light tractors, 17 light trucks, 13 heavy trucks, and 18 light plows. Repairs were also made to 1 State Forest heavy unit, 1 track press, 2 hole diggers, 2 lawn mowers, 1 office trailer, and seats on flat-bed trailers.

Six steel lookout towers were erected during the fiscal year 1956-57.

Eight truck bodies, 5 gates for radios, 15 radio boxes for tractors, 57 window screens, 1 flat truck body, 1 base for radio aerial, and 1 termite spray stand were manufactured at the Sumter Shop.

### **Telephone Lines:**

At the end of the fiscal year, the Commission's telephone system consisted of 332 miles. There were no major improvements made to the system during the year, however the usual maintenance program was carried on by personnel of the Commission to the extent that the lines were kept in a good state of repair throughout the year. Right-of-way clearing of trees and underbrush was necessary to prevent interference with the operation of the lines. Transmission problems were cleared quickly after they developed. As a result of the prompt clearance of transmission troubles and adequate maintenance of the lines and right-of-way, the lines were kept in very good operating condition during the year.

The Dillon County system was converted from local to common battery service during the year. This necessitated the replacement of the old magneto type instruments by more modern

type common batter instruments and resulted in a much improved service.

During the fiscal year, approximately 251 miles of Commission-owned lines which had become surplus to the needs of the Commission because of the expansion of the two-way radio system were either sold or salvaged. All receipts from the sale of surplus telephone lines or materials were used for the purchase of two-way radio equipment for use in further expanding the radio system. This use of funds obtained through the sale of surplus telephone line and materials was made possible by authorization of the General Assembly several years ago.

### **Radio:**

Activity in the statewide radio system consisted of routine maintenance and reinstallations, with the exception of a new 130 ft. radio tower being erected at the Florence District Office and a change in power from 60 to 100 watts output at that location. A 159.27 Mc. unit was also put into operation at Florence.

An additional district radio shop was established at Kingtree.

### **Use of Aircraft in Fire Control:**

Radio-equipped planes are used on a contract basis when necessary to supplement the lookout towers. During periods of low visibility towers cannot adequately cover their area of responsibility and accordingly, without the use of airplanes, many fires would occur and burn for a long period of time undetected before they are accidentally discovered and reported to the Fire Control Organization. Whenever large fires occur, planes are also used to direct the actions of the ground suppression forces. During periods of high fire occurrence, air observers direct fire suppression personnel to those fires which need greatest attention and assist them in organizing their plans of attack.

### **Fire Danger Measurement:**

Fire danger measurement stations are located in each county of the state. Readings are taken at these stations twice daily and the information disseminated to all fire control personnel to keep them informed of current degrees of fire danger. Fire control personnel use this information to determine the probability of



fire occurrence and also the expected rate of spread in the event they occur. Accordingly, personnel are better able to plan their daily work activities and when necessary, make themselves available for immediate fire call. Class fire days are rated from 1 to 5, with 1 the lowest and 5 representing the highest degree of fire danger. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the 5 major ratings: 193 Class No. 1 days; 108 Class No. 2 days; 56 Class No. 3 days; 8 Class No. 4 days, and no Class No. 5 days.

### FOREST FIRE SUMMARY

During the fiscal year 1956-57, South Carolina experienced one of the best fire seasons in the history of the Commission. The 3,883 fires which occurred during the year represent the second lowest number ever recorded for the state, whereas the 46,777.8 acres of timberland burned by illegal fires is the lowest acreage burned figure ever recorded in South Carolina. The above acreage represents 0.41% of the total forest area under protection. The average size of these fires was 12.0 acres—a relatively low figure. Fire occurrence was somewhat low during the summer months and relatively moderate during the winter and early spring period. December, January, February, and March were the worst fire months insofar as number of fires and acreage burned are concerned. This is considered normal for South Carolina. The vast majority of the fires which occurred in South Carolina during the year were caused by smokers, debris burning, and incendiarism which has been the case for a number of years. Eighty-three per cent of all the fires which occurred are attributed to these three causes.

The highest rate of fire occurrence was experienced in Horry County where 291 fires burned 5,505.6 acres. Other counties with higher rates of fire occurrence and acreage burned were Berkeley with 267 fires burning 3,796.7 fires, Clarendon which had 217 fires burning 3,360.4 acres, and Orangeburg with 221 fires burning 3,774.9 acres. Those counties which experienced less than 30 fires for the fiscal year 1956-57 were Abbeville, Anderson, Calhoun, Chester, Edgefield, Greenwood, McCormick, Newberry, Pickens, Saluda, and York. With the exception of Edgefield County, all of those listed above experienced less than 200 acres burned during the year.

Favorable weather conditions which prevailed generally throughout the year attributed much to the low fire record. The average amount of rainfall experienced over the state and the deviation from normal by months is shown in the following table.

MONTH	Amount Rainfall (Inches)	Deviation from Normal (Inches)
July .....	4.44	— 1.41
August .....	3.42	— 2.23
September .....	5.74	+ 1.58
October .....	2.88	+ 0.04
November .....	1.41	— 0.92
December .....	2.37	— 1.16
January .....	2.68	— 0.76
February .....	2.84	— 1.18
March .....	4.27	+ 0.26
April .....	2.61	— 0.64
May .....	5.73	+ 2.24
June .....	4.76	+ 0.16
Total .....	43.15	— 4.02

A five-year summary of precipitation by fiscal years is shown below. Note that a deficiency has been experienced each year.

#### SUMMARY OF PRECIPITATION—FIVE-YEAR PERIOD

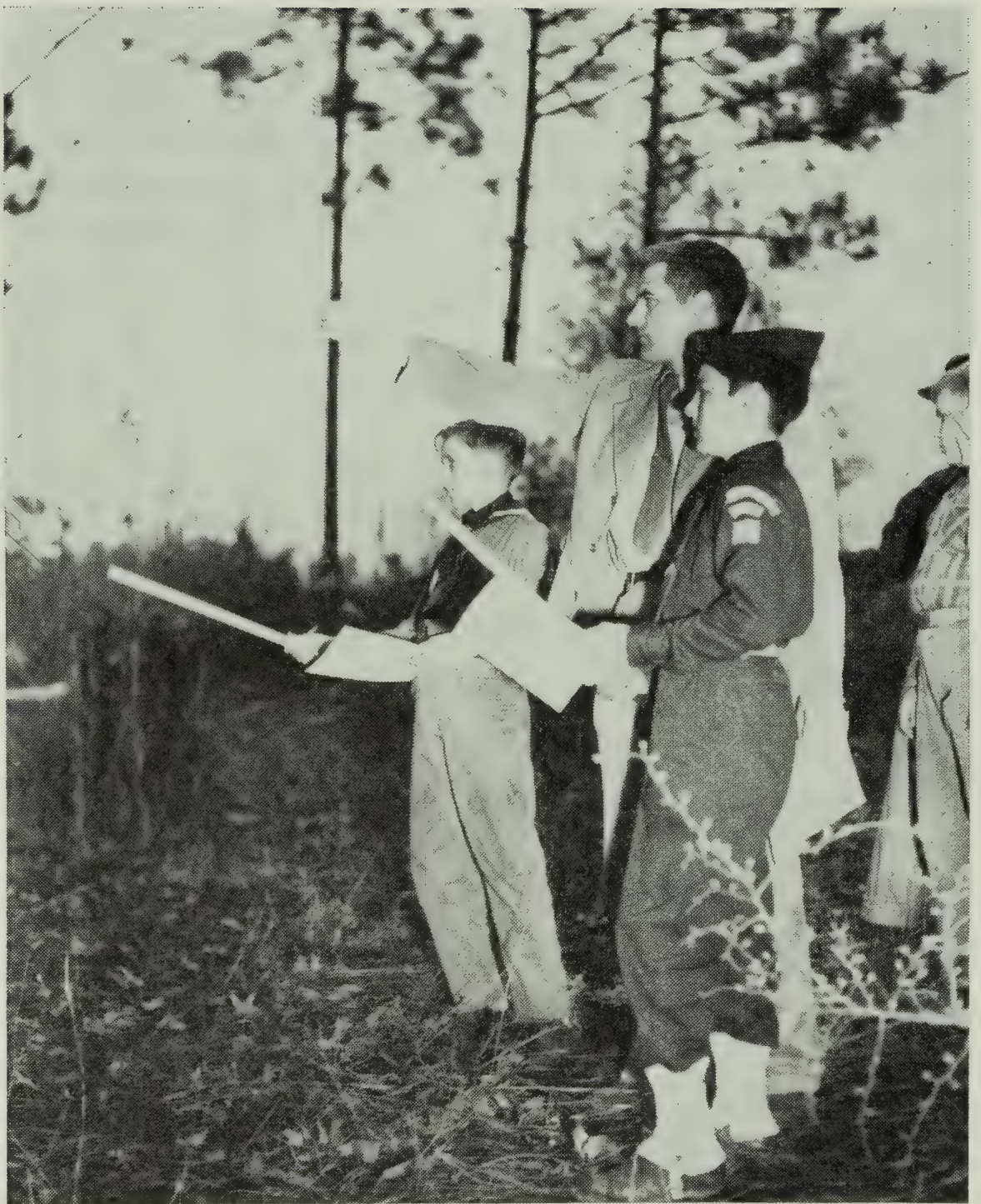
YEAR	Amount Rainfall (Inches)	Deviation from Normal (Inches)
1952-53 .....	44.42	— 1.97
1953-54 .....	40.38	— 6.98
1954-55 .....	37.69	— 9.57
1955-56 .....	43.16	— 4.01
1956-57 .....	43.15	— 4.02
Average .....	41.76	
Total Accumulated Deficiency .....		—26.55

#### Legal Fires:

Legal fires are all of those fires, without regard to reason for burning, which are previously authorized by the landowner and started by him or his authorized agent and which burn entirely upon his land. A total of 2,218 fires which burned 120,357 acres



were conducted by individual landowners during the year and recorded by county unit personnel. Two hundred eighty-one fires which burned 70,194 acres were conducted on various areas for the purpose of hazard reduction. Some 336 fires burning 68,106 acres were handled on hunting preserves for the purpose of improving woodland conditions for hunting and the management of game. Burnings conducted to rid timber areas of accumulated debris and rubbish accounted for 953 fires which burned 5,613 acres. Burning of timberland areas for grazing purposes accounted for 504 fires which burned 12,753 acres. One hundred thirty-four fires which burned 3,691 acres were conducted for miscellaneous purposes such as the destruction of insects, varmints, etc.



Forest conservation education directed toward people of all ages, but with special emphasis on youth, is an integral part of the work of every Commission forester.



# INFORMATION AND EDUCATION

## INTRODUCTION

The importance of informing and educating the people of South Carolina as to forest conservation and State Parks problems and opportunities is a guiding principle of the S. C. State Commission of Forestry.

The information and education program of the S. C. State Commission of Forestry is directed toward carrying out the functions of the Commission in protecting our forest from fire, encouraging wise management and use of our forest resources, and creating an understanding and an appreciation of the value and proper use of State Parks areas.

The job of the Forestry Commission involves not only trees, but people. It might truly be said that the work of the Commission is *of, by and for* people.

South Carolina's system of State Parks exists to serve the recreational needs of people, and it is serving some three million people every year.

Because 93% of the forest land in South Carolina is in private ownership, it is obvious that people must know forestry facts and techniques in order to turn forestry problems into opportunities. The need for solving these problems is pointed up by the fact that even though the forests of South Carolina support the state's second largest industry (next to textiles), the forests are producing at less than half of their potential capacity. When people realize the potential value of woodland production and apply practical methods of conservation and wise use, the amount of timber available for commercial use can be more than doubled. Practically all of the problems of forest conservation in South Carolina can be solved only through the efforts of the people who own the land and the general public.

The adoption of known techniques in forest conservation not only would assure the future supply of existing wood-using industries, but also the increased supply would permit an expansion of this important part of the economy of South Carolina.

South Carolina's forestry problems are problems both of trees and people. People cause 99% of our forest fires, and the poor cutting practices and the large amount of understocked or idle land reflect problems of people. The solutions to these prob-

lems lie with people, and the information and education program, as well as the fire control, forest management, and state park programs of the Commission are directed to people.

The aim of the Commission's information and education program is to get forestry and state park information to people so that the problems can be turned into opportunities. The informational and educational efforts are keyed to the following points:

1. Forest Fire Protection

More than 5,000 illegal woods fires occur every year in South Carolina and 99% are caused by people.

Landowners burn their own woods or permit their woods to be burned in all too many cases.

2. Unwise cutting practices mean low production and inferior forest products.

3. Some one and one-third million acres of idle land or unproductive forest land should be planted to trees.

4. Species of inferior quality occupy much of the existing forest land in the state. These inferior trees must be replaced with trees of good quality to achieve full woodland protection.

5. Full use, appreciation, protection, and support of South Carolina's State Parks program which serve some three million people annually.

## FOREST FIRE PREVENTION

Forest fire prevention as carried out by the Commission throughout the year was given major attention with continued emphasis on the damage caused by the average slow-burning, quiet fires that so many South Carolinians are accustomed to seeing. Particular attention was given the little tree as one of the major losses, especially as their destruction seriously affects the stocking of our woodlands in the future.

With this very realistic approach to teaching forest fire prevention all personnel of the State Commission of Forestry conducted an intensive forest fire prevention program in each county. The value of our woodlands and the safe guards needed to



perpetuate their contribution to an ever growing industry was brought to the attention of every man, woman and child possible through personal contacts; posters and publications available through the national Cooperative Forest Fire Prevention Campaign; illustrated talks and motion picture showings in community meetings, in private homes, civic club meetings, and school rooms. Wall and pocket calendars, school book covers, roadside signs and exhibits as produced by the Commission broadened the means of giving the conservation message to every citizen in the state.

Considerable credit should be given to other interested agencies both private and governmental in the efforts put forth on their part to assist the program of the Commission of Forestry in this very important phase of endeavor.

### **COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN**

For the sixth successive year the Commission's philosophy was used in the Cooperative Forest Fire Prevention Campaign. This national program, featuring Smokey Bear, is guided by The Advertising Council, Incorporated, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service, and is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the most outstanding public service campaigns of The Advertising Council, Inc.

In support of this national campaign a wide variety of materials featuring Smokey Bear are used in South Carolina.

Items such as posters, booklets, bookmarks, blotters, newspaper ads, radio platters, TV spot films and similar materials are used to bring fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flashlights, wallets and moccasins, T-shirts, scarfs, fishing tackle and archery sets, cigarette snuffers and ashtrays, belts, figurines, salt and pepper shakers, handkerchiefs, balloons,

banks, coloring books, comic books, story books, bubble bath, buttons, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, and Smokey "Teddy" Bear dolls.

### **FOREST FIRE RECORD**

The branch of Information and Education continued to keep the press and public informed accurately as to the forest fire situation throughout the state, stressing the need for particular care during the critical dry and windy months of January, February, March, and April. The Commission was active in trying to keep abreast of the demands made for information, articles and photographs for newspapers, and motion picture footage for television use.

The high occurrence and resulting damage from intentionally set fires during the year pointed up the urgent need for an intensified program of child and adult education as well as the need for a strengthened law enforcement program.

### **SCHOOL PROGRAMS**

Foresters, Rangers and Wardens of the Commission of Forestry conducted 1,217 programs in schools throughout the state bringing information on forestry to school children and teachers. Of these 692 programs were held in the 5th and 6th grades where colored slides helped bring the conservation story to 33,371 school children. Similar slide programs as well as demonstrations were held in every vocational agriculture class in each county. As a result of requests from teachers, programs are held in many other classes, too. Many of the slides used are of local scenes and local problems, creating local interest and educational value.

The broad aim of the Commission's school programs is to build a stronger and more appreciative community of the future by giving good instruction and information to our children as to the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

### **FORESTRY DEMONSTRATIONS**

During the year 2,549 persons attended 83 demonstrations conducted by personnel of the Commission of Forestry. These



demonstrations in general cover the field of forest fire protection, correct cutting methods, utilization of forest products, and reforestation.

Demonstrations are very effective in getting forestry information to people and can do much to help make it possible to grow an appreciably greater amount of valuable timber on the 12 million acres of forest land in the state.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson Extension Service, and other groups and organizations. Georgetown Timber Festival was held during the week of October 14 and 15, 1955. Sponsored by the Georgetown Chamber of Commerce, the festival constitutes an expression of appreciation by the people of Georgetown to the woodusing industry of the county and the good living realized from the sale of raw products from the woodlands of the county and the manufactured products from the mills. The activities of the festival included boat races, barbecues, a wood cutting contest, street and ballroom dances, crowning of a queen, and an impressive street parade. The Commission of Forestry participated in the Timber Festival by providing a float for the parade.

### **CONSERVATION WEEK AND ARBOR DAY**

Many people, agencies and organizations cooperated to make the 1956 Conservation Week a real success. South Carolina law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, a special program sheet was printed and distributed to schools, churches, civic and patriotic organizations and other interested groups to assist them in planning programs and observances during Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.



Charcoal, Smokey Bear's Carolina cousin, brought humor and forest conservation messages to 20,000 children during Conservation Week.

Of special interest during Conservation Week and the week following was a series of programs held at all the schools in the Columbia and Cayce areas using the recently acquired bear cub named Charcoal. Charcoal proved extremely popular with the children as Smoky Bear's South Carolina cousin. Charcoal made a personal appearance at 42 schools during the two weeks schedule, and thrilled 19,067 school children of all ages.

A total of 806 Conservation Week and Arbor Day programs were held, with 161,658 persons attending.

### **FIRE PREVENTION ROADSIDE SIGNS**

Maintenance of 450 roadside signs was carried out by rangers and wardens in every county of the state. The signs, erected in a series of three, carry the Keep South Carolina Green seal and messages in the following sequence: USE YOUR ASH TRAY—PREVENT WOODS FIRES—PROTECT LITTLE TREES.

The Commission has obtained basic coverage on the main highways over the state. It is hoped to be able to intensify this project from year to year by providing additional signs along highways where thousands of motorists will see these forest fire prevention reminders.



## MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 59,296 people saw motion pictures on forestry at 614 showings.

## VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

An excellent means of getting forestry information to many people is through the school forestry program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. This cooperative program has been carried on yearly since 1930, when forestry was added as a course of study in vocational agriculture classes in South Carolina.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes. District Foresters and Rangers are available to assist vocational agriculture classes with talks, demonstrations, and field work on forestry, and also provide filmstrips, motion picture films, booklets, posters, and other aids for teaching forestry.

The Forestry Commission sponsors an annual FFA and NFA Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1956-57 school year awards were presented to the winning FFA and NFA Chapters in each Vocational Agriculture District as follows:

#### DISTRICT I—

- (1) Pendleton FFA Chapter
- (2) Blue Ridge High School FFA Chapter

#### DISTRICT II—

- (1) Mt. Zion Institute FFA Chapter
- (2) Monticello High School FFA Chapter

#### DISTRICT III—

- (1) Dentsville High School FFA Chapter
- (2) Blaney High School FFA Chapter

#### DISTRICT IV—

- (1) Walterboro High School FFA Chapter
- (2) Ehrhardt High School FFA Chapter

#### DISTRICT V—

- (1) St. John's High School FFA Chapter
- (2) Conway High School FFA Chapter

#### DISTRICT I—

- (1) Bryson High School NFA Chapter

#### DISTRICT III—

- (1) Edgefield County High School NFA Chapter
- (2) Pine Forest High School NFA Chapter

#### DISTRICT IV—

- (1) Williams Memorial High School NFA Chapter



## RESOURCE-USE EDUCATION

Commission personnel participated in a number of workshops for teachers during the year to stimulate the teaching of conservation at various grade levels in the schools of the state. Resource-use education workshops were held at the University of South Carolina, and at Clemson College during the year in which Commission personnel assisted with instruction in forestry, and the use of State Park facilities.

In addition to the workshops mentioned above, forestry and State Park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation.

The Resource-Use Education movement has stimulated interest in the out-of-doors as an aid to effective teaching. There has been a growing interest in using the group camp facilities in the State Parks for this purpose. It has been demonstrated that using these facilities and camping on school time creates a very effective situation.

The State Commission of Forestry welcomes this instructional use of State Parks, and Commission personnel cooperated with several groups during the year to develop worthwhile projects in day camping and school camping at the State Parks.

## TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and State Parks before many groups. The quality of talks improved considerably during the year due to training, and the use of color slides with the talks undoubtedly made the talks much more interesting and more effective.

During the year a total of 1,236 talks were made by Commission personnel to 51,544 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and State Park matters to South Carolinians. Foresters, Park Superintendents, Rangers, Wardens, Tractor Operators, Tower Operators, and other Commission

personnel play an important part in the Commission's information and education program. As one example of the number of people reached, during the past year approximately 20,000 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting, and preventing fires was usually explained or demonstrated.

## EXHIBITS

The Forestry Commission welcomed the many requests by county fair organizations, garden clubs, church, school, and other groups for educational forestry and state park exhibits because they provided an excellent opportunity for placing forestry and State Park information before the people.

The exhibits used are constantly being improved. They must be attractive and they must get the message across. Color and movement are being added to the exhibits where practicable in an effort to attract the attention of people attending fairs and special gatherings.



A "Talking Smokey" visited a number of County Fairs and other functions during the year. Popular with young and old alike, he brought "taped" messages on forest conservation to them.



Until the past several years an exhibit was rarely requested except for state and county fairs. During this year, garden clubs and other groups requested exhibits regularly throughout the year. This is an indication of interest in forestry and State Park activities by various groups of people.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and State Park information through personal contacts by Commission personnel on duty and through the distribution of literature.

Exhibits were installed by Commission personnel at 77 locations and were seen by an estimated 2,053,515 persons.

The following is a record of where forestry and State Park exhibits were displayed:

### EXHIBITS AT STATE AND COUNTY FAIRS

Location of Exhibit—County Fair	Type of Exhibit	Estimated Attendance
Florence (N).....	Gum x-Section.....	30,000
Bishopville (Lee).....	Gum x-Section.....	12,000
Rock Hill (York).....	F. C. Section, State Fair Exhibit.....	35,000
Bennettsville (Marlboro).....	SPCA Management.....	3,000
Greenville.....	Talking Smokey.....	30,000
Easley (Pickens).....	SPCA Management.....	25,000
Chesterfield.....	SPCA Exhibit.....	5,000
Union.....	SPCA Exhibit.....	30,000
Chester.....	SPCA Exhibit.....	2,000
Kingstree (Williamsburg).....	SPCA Exhibit.....	3,000
Greenwood.....	Talking Smokey.....	50,000
McCormick.....	F. C. Section, State Fair Exhibit.....	3,450
Newberry.....	SPCA Exhibit & Talking Smokey.....	23,000
Lancaster.....	SPCA Exhibit.....	12,000
Marion.....	SPCA Exhibit.....	16,000
Orangeburg.....	Talking Smokey.....	10,000
Anderson.....	SPCA Exhibit.....	85,000
Chester (N).....	SPCA Exhibit.....	3,000
Camden (Kershaw).....	Common Woods of S. C.....	14,000
Sumter.....	Mr. Forest Farmer.....	35,000
Florence.....	Talking Smokey.....	60,000
Moncks Corner (Berkeley).....	F. C. Section, 1953 State Fair Exhibit.....	5,000
Laurens.....	SPCA Exhibit.....	29,400
Manning (Clarendon).....	Mr. Forest Farmer.....	2,500
Walterboro (Colleton).....	SPCA Exhibit.....	5,000
Loris (Horry).....	SPCA Exhibit.....	10,000
Charleston.....	F. C. Section, State Fair Exhibit.....	30,000
Charleston (N).....	SPCA Exhibit.....	10,000
Bamberg.....	Common Woods of S. C.....	1,500
<b>State Fairs</b>		
Columbia.....	Tower, Talking Smokey, Live Bear.....	579,850
Columbia (N).....	Tower, Talking Smokey, Live Bear.....	220,000
		95,000
		<hr/> 315,000

Many rangers use local radio stations to give warnings of periods of high fire danger, to give tips on how to prevent fires, and to present other information on forestry. Records show a total of 224 radio programs on State Parks and forestry were presented during the year, in addition to recorded spot announcements and recorded 15-minute radio programs made available through the Cooperative Forest Fire Prevention Campaign.

During the year many radio stations broadcast the 13-week series of 15-minute programs produced as part of the nationwide Cooperative Forest Fire Prevention Campaign. These programs, featuring Jelly Elliott and the Three Knothheads; and Billy Johnson, The Singing Woodman, and the Sons of the Pioneers have been very popular in South Carolina, and several stations have repeated the series. These programs combine hillbilly, western and folk music with stories and messages on forest fire prevention and on other phases of forestry. In addition, many radio stations used platters containing short forest fire prevention messages which were produced as part of the CFFPC program.

Commission personnel appeared on seven television programs, and provided films, slides, and other materials on State Parks and forestry for TV use. Motion picture film trailers featuring Smokey Bear were distributed to all TV stations in the state, and were widely used.

The Commission of Forestry plans to continue using radio and television facilities to help do the job of informing and educating in the fields of forestry and State Parks in South Carolina.

## TRAINING

Every employee of the Forestry Commission has an important part in doing the information and education job. Because the Forestry Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has resulted in a better and more complete educational program. News releases are more readable and more interesting, radio programs are more effective, talks and slide lectures in all phases of our work are more interesting and more effective. Fire control training stressed



## EXHIBITS, FLOATS, AND DISPLAYS FOR SPECIAL EVENTS

(Other than County or State Fairs)

Lake City (Parade)—Smokey Bear.....	10,000
Hampton Watermelon Parade (float).....	12,000
Early Branch Watermelon Festival—Talking Smokey Bear.....	5,000
Cheraw State Park (Boys Forestry Camp)—Common Woods of S. C.....	100
Clemson Farm and Home Week.....	200
Clemson (National Conference on Conservation Education)— Talking Smokey, Common Woods of S. C., and Roadside Signs.....	120
Barnwell (Electric Fair)—Talking Smokey Bear.....	2,000
Kingstree (Santee Cooperative Electric Fair)—SPCA Management Exhibit.....	2,200
Columbia (Advisory Committee of County Forestry Boards)— Roadside Signs, Common Woods of S. C., and Talking Smokey.....	90
Conway (Horry County Electric Fair)—SPCA Management Exhibit.....	7,500
Swansea (Community Fair)—Smokey Suit.....	900
Bennettsville (REA Electric Fair)—SPCA Management Exhibit.....	500
Florence (Fire Prevention Parade)—Smokey Suit and truck.....	15,000
Columbia (Jaycee Meeting)—Smokey Suit.....	100
North (Garden Club)—Common Woods of S. C.....	30
Columbia (Fire Prevention Parade)— Smokey Suit and motorized presuppression equipment.....	10,000
Georgetown (Timber Festival)—Automatic Slides— Fire suppression tools, fire prevention materials and forest management.....	9,000
Olar (Flower Show)—Common Woods of South Carolina.....	50
Aiken (Museum Fair)—Common Woods of South Carolina.....	250
Aiken—(PTA)—Talking Smokey.....	500
Ridgeland (Halloween Parade)—Smokey Suit.....	1,200
Columbia (Carillon)—Posters and 1-horse rig.....	125,000
Orangeburg (Christmas Parade)—Smokey Suit.....	10,000
Dillon (Christmas Parade)—Smokey Bear float.....	10,000
Bamberg (Christmas Parade).....	5,000
St. George (Christmas Parade).....	1,200
Manning (Christmas Parade)—Smokey Suit.....	5,000
Ridge Spring (Talent Show)—Smokey Bear Suit and Talking Smokey.....	2,500
Rock Hill (Children's Nature Museum)— Common Woods of S. C., Talking Smokey and Charcoal.....	1,500
Latta (Parade)—Smokey Bear Suit and posters.....	3,000
Aiken (Parade)—Smokey Bear Suit and posters.....	2,500
Columbia (DAR Annual State Conference)— Andrew Jackson Historical State Park Display at Columbia Hotel.....	125
Columbia (Cub Scout Program at Maxey Gregg Park)—Smokey Suit and Movie.....	50
Camden (Garden Club)—SPCA Exhibit.....	1,500
Darlington (REA Electric)—SPCA Exhibit.....	1,200
Latta (Fire Prevention Parade)—Smokey Bear and truck.....	5,000
Florence (Pee Dee Fair)—Gum Block Exhibit.....	2,000
Florence (Spring Flower Show)—Wood Display.....	500
Newberry (Newberry College Centennial Celebration)—Selected Forestry Murals.....	1,500
Aiken—Posters and murals.....	300
Aiken—Selected posters and murals.....	2,000
Kingstree (Flower Show)—Selected murals.....	500
Greenville—Management panelite.....	500
Colleton County (Fire Prevention Float).....	5,000
Summerville—(Christmas Parade Float).....	800
Ridgeville—(Christmas Parade Float).....	400
Total .....	263,815
Grand Total.....	1,158,665

## RADIO AND TELEVISION

Radio and television are valuable for getting forestry and State Park information to large numbers of people.

Radio stations in South Carolina generously cooperated with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, as well as information on State Park facilities.

Several districts have regularly scheduled programs on various radio stations. All districts have used radio to some extent.

the fact that the forest fire prevention program and an expanded forest management program depend on the effectiveness of the selling job done by each member of the organization in its respective community.

State Park personnel are continually aware that in order to serve the public and to promote an understanding and appreciation of the State Parks program and its objectives, a continuing job of informing and educating park users is necessary. A part of the State Park Superintendents training meeting held each year is devoted to discussions and instruction in public relations and information and education activities to enable the State Park program to better serve the three million visitors who use State Park facilities each year.

### **NEWS RELEASES AND ARTICLES**

Newspapers and magazines accepted and used much material prepared by personnel of the Commission on forestry and State Parks. There is constant effort to furnish better quality photographs and written material for the editors. The material is also more acceptable to the readers because it is more readable and more interesting.

During the year Commission personnel prepared 558 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during fire situations, news items would be given orally to individual papers and to the wire services.

In addition to news releases, several feature articles on various phases of State Parks and forestry were prepared. Pictures or prepared mats illustrating the story were usually sent with the feature.

During the year a number of special articles were prepared for magazines and other special publications to provide State Park and forestry information to general and special audiences.

Forestry Commission personnel in every county of the state prepared news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors. The excellent press coverage has helped place forestry and State Park news before the people more prominently than ever before.



## BOYS' FORESTRY CAMP

The tenth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 6-11. Eighty-nine young men representing every county in the state attended the week-long camp. This was the largest number of boys to attend camp in its ten-year history. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject "Why I Would Like to Attend Boys' Forestry Camp." On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and fun characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planning techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by State Parks.

## PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out the forestry and State Park information program. One important function of printed materials is to provide detailed information to those who request forestry and State Park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies, and other organizations, groups, and agencies who published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. In this way forestry

and State Park information is given widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

### **SIGN AND WOODWORKING SHOP**

The Commission's sign and woodworking shop continued to produce routed letter signs, picnic chairs and tables, fair exhibits, and other necessary cabinet and carpentry work. The distinctive routed letter signs identified the various forestry and State Park installations with the Commission of Forestry. The Commission's fair exhibits constructed in the shop helped to bring forestry and State Park information to many people during the year.

### **SOUTH CAROLINA TREE FARM SYSTEM**

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must have demonstrated both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. His neigh-



bors and people passing by will see the sign and the good forestry practices and come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. The members of the S. C. Tree Farm Committee are:

*Chairman—*

Vern Cutler, Argent Lumber Company, Hardeeville

*Members—*

Joe Youorski, Champion Paper and Fibre Company, Newberry  
 Harvey Rhettberg, Poinsett Lumber and Mfg. Co., Pickens  
 H. F. Lathrop, Lightsey Brothers, Miley  
 H. F. Bishop, Consulting Forester, Marion  
 C. P. Key, Lodge  
 T. M. Folger, Taylor-Colquitt Company, Spartanburg  
 Charles H. Flory, State Forester, Columbia  
 George B. Nutt, Clemson Agricultural College, Clemson

Assistant State Forester W. T. Ahearn serves as Secretary to the State Tree Farm Committee.

As of June 30, 1957, there were 206 Tree Farms in the State comprising 1,425,498 acres.

Names of landowners certified during the past year are marked with an asterisk on the following list of South Carolina Tree Farmers:

## SOUTH CAROLINA TREE FARMERS

NAME—ADDRESS	Certified Tree Farm Acreage
Mrs. Walter C. White, Statesburg	5,500
McBride Dabbs, Mayesville	2,960
J. T. Johnson, Lynchburg	100
C. M. Leonard, Camden	5,500
D. G. Lesslie, White Oak Farm, Rt. 2, Rock Hill	205
Corey P. Key, Lodge	1,220
M. P. Howell, Jr., Route 1, Ruffin	2,400
Poinsett Lumber & Manufacturing Co., Pickens	64,000
C. E. Bullard, Early Branch	180
Wade C. Harrison, Rt. 2, Troy	3,400
W. D. Summer, Rt. 2, Newberry	70
J. C. Rich, Islandton	250
Dr. C. L. Stevens, Campobello	163
Frank E. Timmerman, Edgefield	400
Joe L. Tolbert, Ninety Six	4,050
Pegues Family, RFD, Bennettsville	1,700
F. E. Coxe, Rt. 2, Bennettsville	1,300
Mrs. H. L. Tilghman, Marion	11,399
A. H. Rogers & Sons, Society Hill	550
Benton D. Dargan, Rt. 3, Darlington	1,000
S. B. Huff, Rt. 2, Piedmont	75
G. L. Williamson, Rt. 1, Florence	800
Mrs. H. B. McCall, Effingham	1,000
Koppers Co., Inc., Wood Preserving Div., Charleston	9,474
E. B. Hare, Star Route, Westminster	60
Dixie Clay Co., Bath	1,912
John Tatum, Bamberg	300
J. F. Meares, Rt. 1, Nichols	200
H. N. Cousar, Rt. 1, Latta	500
Landon Thomas, 2226 Pickens Rd., Augusta, Ga.	515
J. R. Hawkins, Lykesland	110
Mrs. S. B. McMaster, 1900 Heyward St., Columbia 5	2,900
Mr. and Mrs. E. M. Harris, Bennettsville	275
S. J. Chandler, Minturn	400
J. B. Heins, Blythewood	85
J. Lamar Brantley, Mgr., Good Hope Corporation, Ridgeland	12,000



NAME—ADDRESS	Certified Tree Farm Acreage
International Paper Co., Southern Kraft Div., George- town .....	366,438
Mrs. E. M. and McIver Williamson, Mont Claire.....	1,225
H. N. Slater (The Pine Tree Timber Co.), Ridgeland....	1,000
George Roberts, Pineland.....	50
Oscar Wigington, Salem.....	2,940
Union Bag & Paper Corp., Savannah, Ga.....	54,757
Fairfield Forest Products Co., Newberry.....	110,256
J. H. A. Carter, Lodge.....	200
Niles C. Clark, Waterloo.....	665
S. W. Mims, Route 1, Harleyville.....	1,600
A. W. Murray, 2203 Johnston St., Newberry.....	4,684
E. F. Conger, Box 149, Staunton, Va.....	6,435
West Virginia Pulp & Paper Co.....	20,398
West Virginia Pulp & Paper Company, Georgetown.....	364,331
Ferdinand Gregorie, Mt. Pleasant.....	525
F. W. Atkinson, Rt. 4, Augusta, Ga.....	155
Duke Power Company, Charlotte 1, N. C.....	61,500
R. C. Kinard, Islandton.....	1,155
Homer Saunders, Rt. 3, Walterboro.....	3,500
E. Heyward Benton, Rt. 4, Walterboro.....	75
E. D. Kinard, Islandton, S. C.....	268
M. W. Wise, Elko.....	187
L. W. Anderson, Box 432, Williston.....	860
Graniteville Company, Graniteville.....	15,550
O. L. Warr, Rt. 2, Timmons ville.....	200
E. V. Golding, Waterloo.....	135
J. T. Squires, Rt. 3, Latta.....	285
D. H. Sullivan, Box 115, Lexington.....	149
Gair Woodlands Corps., Savannah, Ga.....	65,683
C. A. Harper, Estill.....	4,000
Bruce Harter, Fairfax.....	450
Dunbar Oswald, Rt. 2, Allendale.....	700
Guy V. Whitener, College St. Extension, Newberry.....	1,847
Ben Alderman, Alcolu.....	1,680
G. T. Floyd, Manning.....	445
G. M. Bagnal, Rt. 3, Manning.....	40
M. Earl Stone, Rt. 1, Saluda.....	194
F. M. and M. S. Dwight, Eastover.....	144

NAME—ADDRESS	Certified Tree Farm Acreage
Olin J. Kinsler, Rt. 1, Columbia	205
A. J. Lever, Rt. 1, Columbia	112
J. D. Peeples, Early Branch	308
Kendall Mills—Wateree Div., Camden	450
James L. Sweet, Boykin	600
H. Gates Lloyd, Haverford, Pa. & Richard W. Lloyd, 1707 Lyttleton St., Camden	2,854
R. W. Lloyd, 1707 Lyttleton St., Camden	1,370
Cypress Woods Corp., Ridgeland	20,000
Brooks B. Weber, Rt. 5, Union	800
Holliday Brothers, Galivants Ferry	2,000
W. H. Manning, Jr., Barnwell	549
Tuomey Hospital, Sumter	1,900
Mrs. E. R. Mobley, 607 Edisto St., Johnston	1,000
George Patrick, Bowman	700
Anthony Fogle, Neeses	140
Union Memorial Presbyterian Church, Rt. 1, Winns- boro	425
Thomas W. Timms, Rt. 1, Box 60, Winnsboro	400
Cragmoor Farms, Moore	1,100
J. P. Brunson, Sr., Darlington	468
Eastover School, Eastover	5
William H. Wicker, Univ. of Tennessee, Knoxville, Tenn.	586
P. T. Harris, Silverstreet	200
William E. Senn, Newberry	135
G. B. Reagin Est., Rt. 4, Newberry	250
Dr. J. E. Grant, 1817 Lindsey St., Newberry	197
E. Guy Foster, McConnells	400
Charlton DuRant, Manning	229
E. E. Dargan, Conway	160
J. Porter Gaston, Richburg	155
J. T. Clinkscales, Rt. 1, Abbeville	370
Charles B. Abell, Lowrys	440
Dr. Stanley C. Baker, Greenwood	100
Misses Nora and Mae Davis, Troy	181
W. R. Cothran Estate, 312 Grace St., Greenwood	490
J. Hearst Coleman, 248 Jennings Ave., Greenwood	400



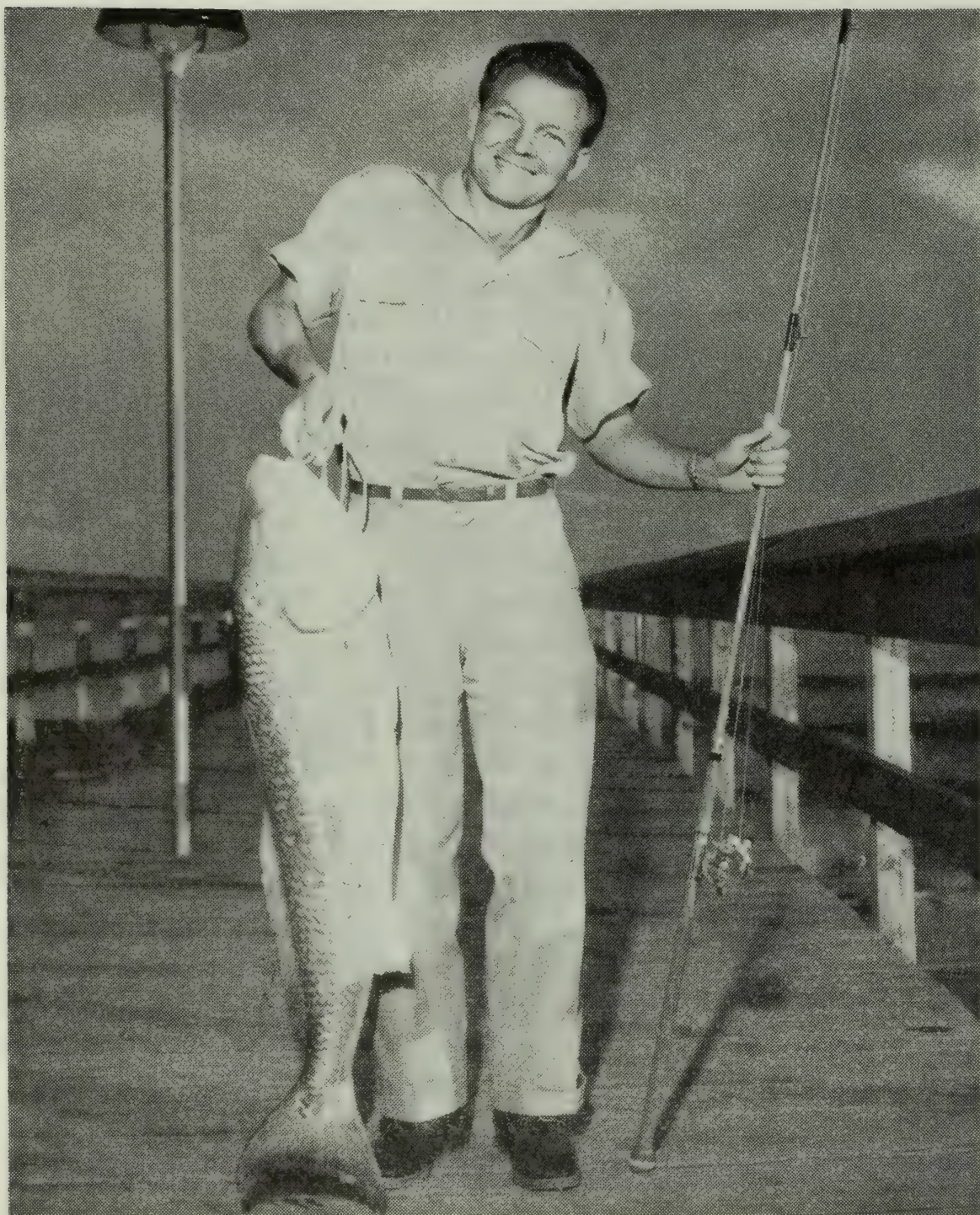
NAME—ADDRESS	Certified Tree Farm Acreage
Frank J. Wideman, 1366 National Press Bldg., Wash- ington, D. C.	273
C. Cooper Sanders, Jr., and Howard P. Mabry, Green- wood	106
David Dows, Bradley	1,100
Henry G. Ligon, Rt. 2, Easley	24
J. B. Guess, Jr., Denmark	1,000
W. W. Woolsey, Montmorenci	500
Samuel H. Swint, Graniteville Company, Graniteville	327
Mrs. Margaret H. Lloyd, Camden	800
Mrs. V. T. Chastain, Box 897, Hampton	317
Willie Reed Bishop, Rt. 4, Walterboro	100
R. C. DeLoach, Furman	405
Mrs. Annie M. Pickney, 1006 Henderson St., Columbia	250
C. J. Cate, Jr., 129 S. Waccamaw, Columbia	455
John C. Billingsley, 924 Fair St., Newberry	111
J. Roy Cunningham, Rt. 6, Lancaster	300
Clyde D. Ware, Rt. 2, Iva	48
H. F. Bishop and C. H. Schaeffer, 316 Woodland Dr., Marion	43
Vance Perritt, Mullins	60
F. C. Edge, Mixonville	95
A. D. Strickland, Rt. 3, Loris	100
H. L. Bellamy, Wampee	25
J. M. Huber Corp., Langley	1,854
J. Ansel Caughman, Rt. 2, Leesville	1,200
G. E. King, McBee	950
R. D. King, McBee	270
Marlin H. Bruner and W. C. Nettles, Clemson	415
Marlin H. Bruner, Clemson	104
A. C. Flora, 1511 Hagood Ave., Columbia	204
St. Clair Davis, Marion	250
Frank H. Covington, 311 Fayetteville Ave., Bennettsville	100
Helen S. Tiencken, 4009 Fessenden St., N.W., Washing- ton 16, D. C.	297
Stewart C. Hope, Agent, 3350 Millwood, Box 5054, Columbia	505
Dr. R. N. Kennedy, 15 E. Jones Street, Savannah, Ga.	264
Mrs. Sarah Goggans, Newberry	562

NAME—ADDRESS	Certified Tree Farm Acreage
T. C. Jeter, 252 Sims Ave., Columbia	108
Dr. W. G. Gamble, Jr., 2010 Fifth Avenue, Bay City, Michigan	842
J. L. Mason, Clarks Hill	1,211
Atlantic Coast Line RR Co., Wilmington, N. C.	376
W. H. Bradford, Rt. 4, Sumter	200
H. H. Hentz & Son, Box 181, Newberry	8,434
Hampton & Branchville RR Co., Inc., Hampton	4,902
Edward Duckworth, 1126 Douglas St., Newberry	44
Horace T. Oxner, Rt. 2, Saluda	107
Vance & Dwiggin Co., Newberry	783
Argent Lumber Co., Hardeeville	5,888
J. T. Strahan Co., Port Wentworth, Ga.	1,655
Lightsey Bros. Lbr. Co., Miley	39,584
Dr. and Mrs. Carnes Weeks, Mt. Holly	6,410
Hubert Boyd, Clinton	873
J. B. Frazier, Jr., and J. B. Frazier, III, Winnsboro	669
T. B. Amis, Box 71, Newberry	650
Mrs. T. A. Black, Sr., Rt. 2, Box 2, Ruffin	1,131
Bess Caldwell Bursinger, 2006 Luther St., Newberry	506
Albert G. McCaughrin, 1208 Calhoun St., Newberry	38
B. Hardin Keitt, 200 Hassel Place, Charlotte 7, N. C.	874
J. Peter Grace, Jr., 7 Hanover Square, New York, N. Y.	12,700
R. L. Fairey, Jr., Rowesville	121
Dr. M. D. Farrar, 129 Folger St., Clemson	103
Thomas D. and Christine M. Hinkle, Sunset	225
Stiles M. Harper, Estill	2,654
Guy V. Whitener, Jr., E. Wells Park Drive, Newberry	389
Luke Winchester, Sunset	2,846
J. B. Frazier, III, Winnsboro	180
Dr. G. W. Cunningham, Laurens	114
G. S. Carter, Jr., Heriot St., Charleston 31	1,183
Floride M. and William Glover, Willowbank, Georgetown	70
Atlantic Creosoting Co., Inc., 17 Battery Place, New York 4, N. Y.	3,144
Vestal Lbr. & Mfg. Co., Knoxville, Tenn.	5,922
W. W. Smith, Andrews	4,482
*R. J. Makela, 530 W. Church St., Bishopville	697
*D. L. Brown, 118 Harvard Dr., Spartanburg	89



NAME—ADDRESS	Certified Tree Farm Acreage
*Sam Hardin Smith, Rt. 3, Loris	290
*Flack-Jones Lumber Co., Inc., Moncks Corner	3,200
*J. D. Martin, Box 395, Summerville	300
*C. Hutt Shelley, Nichols	433
*Robert Kennerley, Newberry	65
*R. M. Cooper & Archie Beattie, Wisacky	628
*Est. of Susan Guignard (R. Sanders Guignard, Trustee), Parkland Inc., Cayce, S. C.	2,760
*Phillip R. Freeman, Oakland, Calif.; Mrs. E. C. Coker, Clemson; Mrs. B. W. Porter, New Orleans, La.	4,819
*Porcher G. Rembert, Rt. 2, Box 45 B, Sumter	100
*H. Chr. Sonne, 15 Exchange Place, Jersey City 2, N. J.	9,500
*Ellis Est. (H. H. Ellis, Agent), Rt. 5, Saluda	100
*James Bledsoe, RFD, Saluda	15
*H. T. Anderson, Macon, Ga.	410
*Wade Hampton Cobb, 1215 Anthony Ave., Columbia	70
*Weyman Coleman, Rt. 5, Saluda	1,000
*Calvin Rivers, Chesterfield	1,700
*H. W. Merck, Rt. 2, Bishopville	166
*Robt. J. Maxwell, Jr., 239 N. Main St., Greenville	80
*Dr. L. W. Anderson, Williston	1,200
*W. C. Ellis, Jr., Rt. 4, Abbeville	291
*Holly Hill Lbr. Co., Holly Hill	9,150
*O. H. Wienges & Son, St. Matthews	2,437
*Miss Stella M. Ruff, Jenkinsville	72
*B. F. Williamson, Rt. 3, Darlington	1,700
*Dr. W. T. Martin, 605 McDaniel Ave., Greenville	125





Fishing is one of the many recreation activities which draws visitors to our state parks from all over South Carolina as well as from other states. More than three million visitors enjoy South Carolina's state parks each year.



# STATE PARKS

## INTRODUCTION

Attendance at the state parks for the fiscal year increased nearly ten percent and this figure is in line with the national averages. It is also in keeping with the five-year average for park attendance in South Carolina where the parks attract more than three-million visitors annually. The park-use in South Carolina is one of the heaviest in the South.

National averages for operational expenditures were up twenty percent, but in South Carolina there was no increased appropriation for state parks. An operational expenditure of \$335,600 for South Carolina State parks to play host to 3,248,891 visitors, makes a cost of slightly more than 10 cents per park visitor—a figure considerably less than the national average of 19 cents.

*Attendance:* While the attendance at all parks was good, the greatest single increase was had at Myrtle Beach State Park. Factors contributing to this increase were the opening of a new swimming pool, good fishing on the pier, and a sizeable increase in the number of tent and trailer camping groups.

Attendance at the five state parks for Negroes had the best year when 129,757 park visitors were counted. This was an increase of 700 over last year and 28,500 over a previous high record.



The Myrtle Beach State Park Fishing Pier attracts many visitors, especially in the fall of the year when fishing is at its best.

The three million visitors found varied activities within the 21 parks. A million and a quarter picnickers packed lunches and grilled meats in the out-of-doors. More than a million swimmers sunbathed on the beach and swam in the waters of the parks—the pools, lakes and ocean. Fishermen continued their sport; hikers found the trails interesting; campers crowded the organized group camp; and school groups found the outdoor classrooms exciting and inspiring. Nomads in trailers and with tents sought shelter within the park areas.

These park visitors came in  $\frac{3}{4}$ -million automobiles and buses, of which 135,000 carried out-of-state licenses.

### APPROPRIATIONS

The fiscal year appropriation for operations totaled \$335,600—a figure approximately the same as for the past few years. Appropriated funds are not keeping pace with added facilities and increased facility use; thus creating a build-up in delayed maintenance. This is unwise. An appropriation of from two to three percent of the capital investment for repair and maintenance operation is a sound policy, or an annual overall appropriation of approximately \$385,000 for good management and operation.

### FAMILY VACATION CABINS

Family vacation cabins have long been a wanted facility in the state parks. For more than 20 years South Carolinians have sought reservations at these cabins for summer vacations or week-end outings in the Fall and Spring.

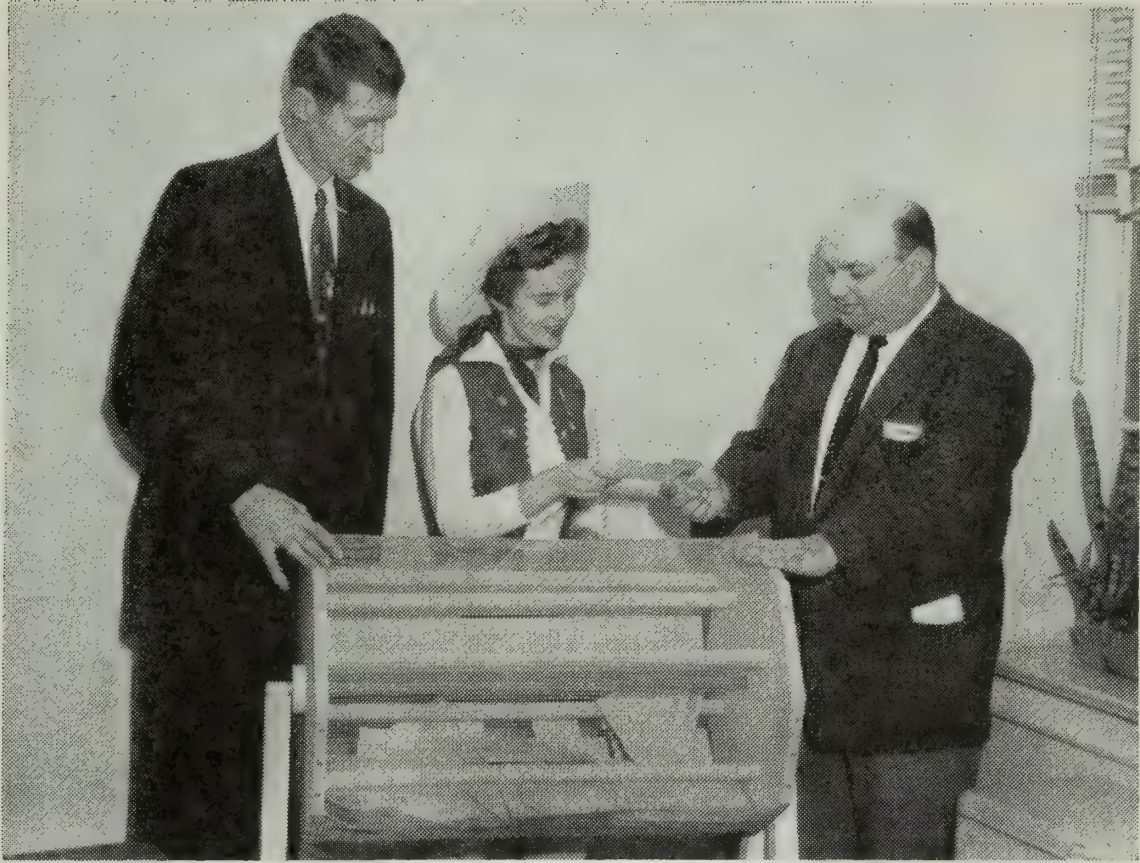
The 61 cabins in eight state parks—scattered from the mountains to the seacoast accommodated nearly a thousand white families during the year. The cabins for Negro families have received only scattering use.

The five cabins at Edisto Beach State Park remain closed and applications for their use have to be denied.

Below is a table of the distribution of the cabins, with the number of cabins and their rentals.

Park—County	Cabins	Weekly	Out-of-Season Week-End
Cheraw—Chesterfield .....	9	\$24—\$36	\$ 9—\$15
Edisto Beach—Charleston.....	5	Closed	.....
Givhans Ferry—Dorchester.....	5	\$24	\$9
Hunting Island—Beaufort .....	4	\$42	\$18
Myrtle Beach—Horry.....	5	\$42	\$18
Oconee—Oconee .....	20	\$20—\$36	\$ 8—\$15
Poinsett—Sumter .....	6	\$24—\$42	\$ 9—\$15
Santee—Orangeburg .....	2	\$28	\$12
Table Rock—Pickens .....	12	\$24—\$44	\$10—\$24
<b>Facilities for Negro Families:</b>			
Hunting Island—Beaufort .....	2	\$35	\$12.50
Pleasant Ridge—Greenville.....	2	\$35	\$12.50





Bill Winter, The State newspaper (left); Robbie of Robbie's Roundup, WNOK-TV; and Bob Truere of WCOS Radio are shown making the drawing for the 1957 summer season reservations for family vacation cabins at South Carolina's State Parks.

All cabins have electric lights, electric stoves, and electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin-user must bring blankets, bed linens and towels, and silverware, such as knives, forks and spoons, as these are not included.

During the period June 1st through Labor Day summer rates are effective and cabins are rented for a period of one week only. After Labor Day and through the following May cabins are available at reduced rates and for week-end use. Many cabins are winterized and comfortable throughout the year.

To give every family an equal opportunity to obtain a cabin for a summer vacation, assignments are made as a result of a public drawing. All South Carolina applications are considered first; then out-of-state requests are reviewed.

Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, Box 357, Columbia, S. C., and must be received in Columbia prior to March 1st.

## GROUP CAMPS

Seven group camps—six for white and one for Negro campers—located at four state parks, Paris Mountain, Cheraw, Kings Mountain and Poinsett, continue to supply the facilities for several thousand children seeking out-of-doors adventure. With a daily capacity of 550 campers and about 13 weeks in the summer season, some 38,000 camper days are counted at the seven areas. Church and school groups, Boy and Girl Scouts, YMCA and YWCA's make up the greater portion of the use agencies.

## TENT AND TRAILER CAMPING

With the up-surge in use by park visitors seeking space for tent or trailer camping, several new areas were developed during the year, and the Myrtle Beach space enlarged. The increase in numbers of these outdoor enthusiasts is nationwide in its scope and is affecting parks, both state and national. An area consists of individually assigned space along a roadway and include: electrical outlet, water connection, table and cooking grill. Toilets and showers are available to the campers.

Developed areas are in operation at Aiken, Barnwell, Cheraw, Chester, Hunting Island, Kings Mountain, Myrtle Beach, Oconee, Poinsett, Santee, Table Rock and Colleton Wayside.

Charges for each space is \$1.25 at Myrtle Beach and \$1.00 at all other developed areas. Limited camping facilities are available at 10 other state parks at a cost of 50c per day.

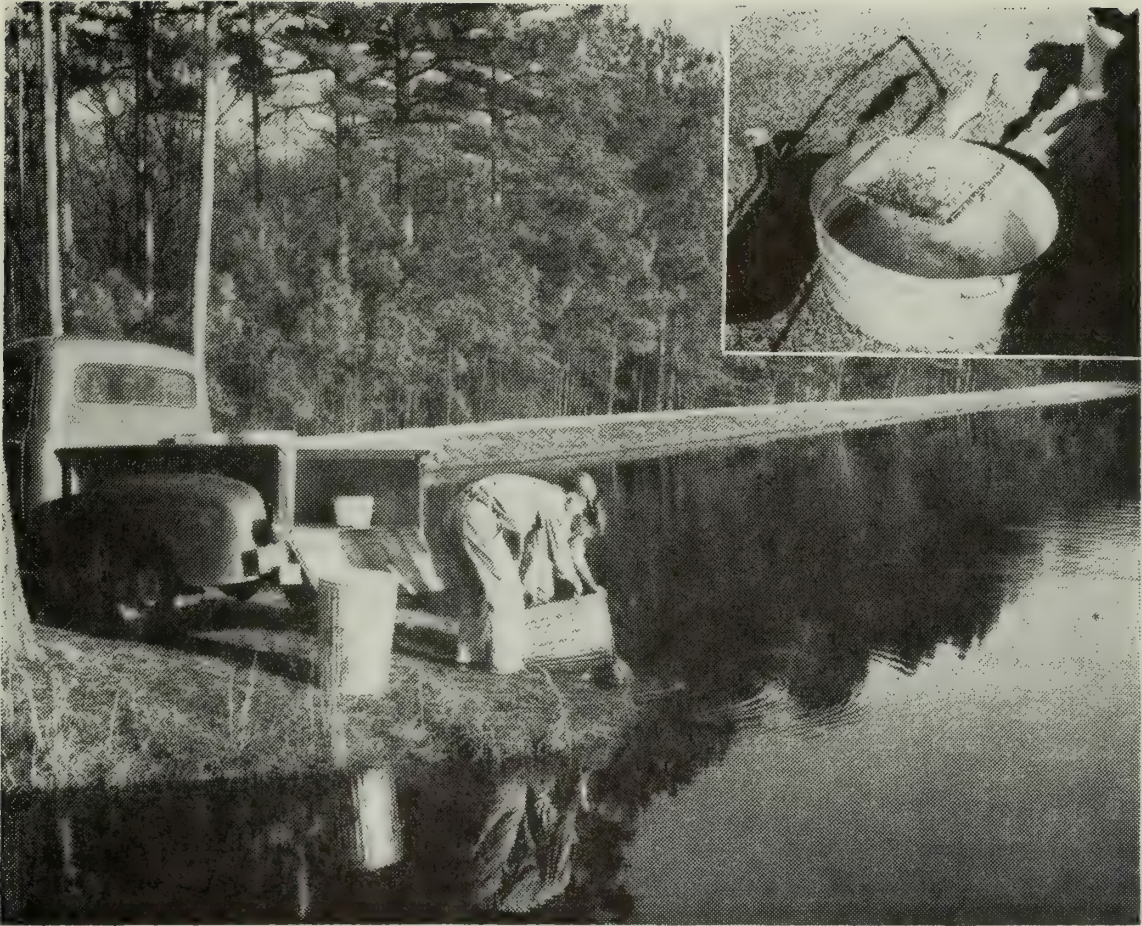
## FISH RESTOCKING PROGRAM

In an effort to improve fishing in the state park lakes, a co-operative project was set up with the State Wildlife Resources Commission to recondition nine of the state parks' waters.

The lakes at Oconee, Table Rock, Campbells Lake, Cheraw, Little Pee Dee, Aiken, Paris Mountain, Pleasant Ridge, and Sesqui-Centennial were drained, treated and new stock introduced.

It is anticipated that by the Fall of 1958, good fishing will be experienced by visitors to the state parks. There is no special charge levied for fishing in these state areas.





Small bream (insert) and bass were introduced into state park lakes at Aiken (above), Oconee, Table Rock, Cheraw, Campbells Lake, Little Pee Dee, Paris Mountain, Pleasant Ridge, and Sesqui-Centennial State Parks after lakes were drained and treated. These lakes will be closed to fishing until the fall of 1958.

## STATE PARK ACQUISITION AND DEVELOPMENT

It was in 1934 that the first area in South Carolina was donated for a state park. This was in Chesterfield County and embraced 700 acres near Cheraw. Funds for the acquisition came from public subscription. Other areas which were to become Aiken, Givhans Ferry, Kings Mountain, Myrtle Beach and Poinsett State Parks were also added this first year.

Two years later the first area was ready to receive the public and on July 1, 1936 the first official park user visited Myrtle Beach State Park.

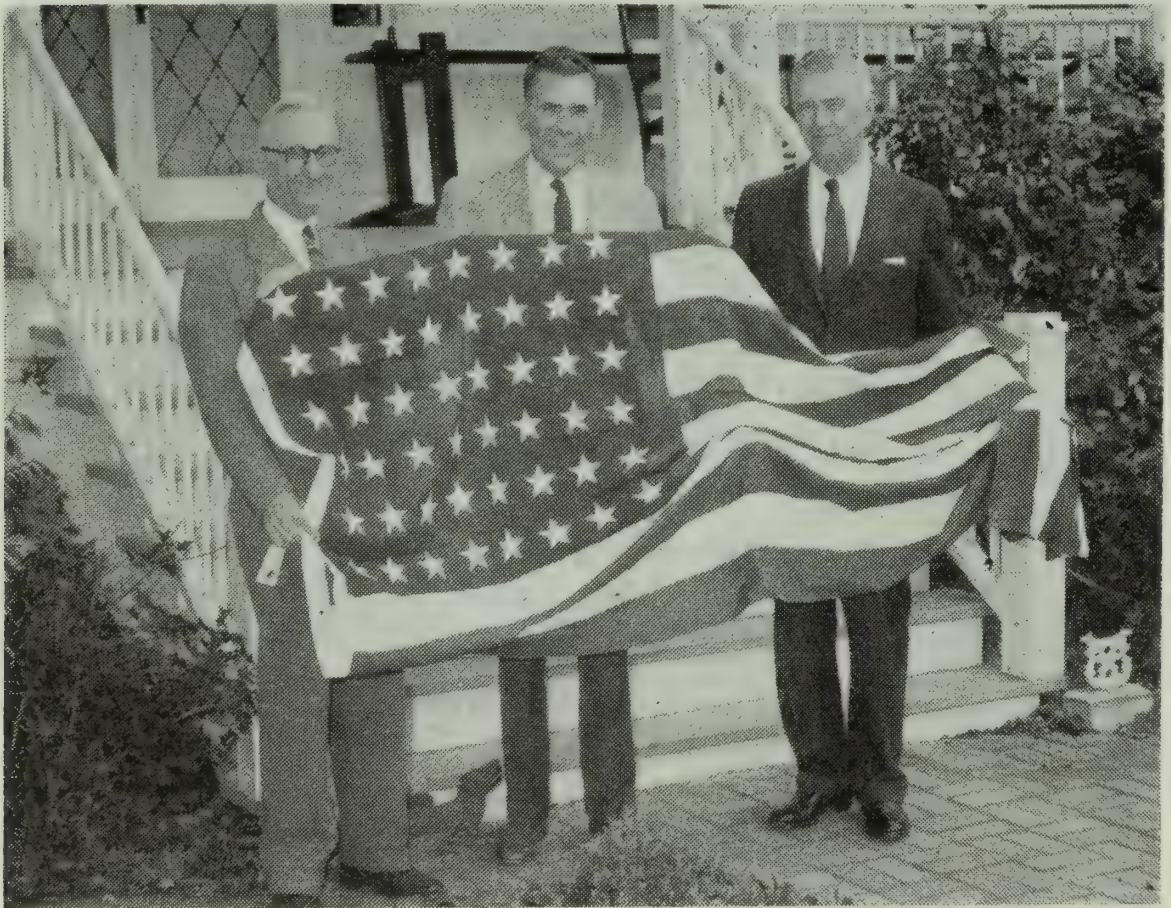
Of the 22 state parks, 21 areas are for white use and five areas are developed for Negro families. This proportion is in line with the use demand.

During the year a seven acre tract of adverse holding was acquired and added to the Barnwell State Park area.



The 22 state parks, with their acreage, location, date of establishment or acquisition, and date opened to visitors, are shown below :

Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken .....	1,067	Aiken.....	July 1934	Aug. 1936
Andrew Jackson Historical..	360	Lancaster.....	April 1953	Mar. 1957
Barnwell .....	307	Barnwell.....	July 1937	Aug. 1939
Cheraw .....	7,361	Chesterfield.....	March 1934	July 1939
Chester .....	523	Chester.....	May 1935	July 1939
Croft .....	7,135	Spartanburg.....	May 1949	June 1949
Edisto .....	1,255	Charleston Closed Feb. 1956.....	Feb. 1935	June 1937
Givhans Ferry.....	1,235	Dorchester-Colleton.....	Oct. 1934	June 1937
Greenwood .....	914	Greenwood.....	April 1938	July 1940
Hunting Island.....	5,000	Beaufort.....	July 1938	June 1941
Kings Mountain.....	6 41	York-Cherokee.....	Nov. 1934	June 1940
Lee .....	2,839	Lee.....	June 1935	June 1941
Little Pee Dee.....	835	Dillon.....	June 1951	June 1955
Myrtle Beach.....	312	Horry.....	Aug. 1934	July 1936
Oconee .....	1,165	Oconee.....	July 1935	June 1937
Paris Mountain.....	1,275	Greenville.....	April 1935	June 1937
Pleasant Ridge.....	300	Greenville.....	Sept. 1950	June 1955
Poinsett .....	1,000	Sumter.....	Aug. 1934	Aug. 1936
Rivers Bridge.....	390	Bamberg.....	May 1945	July 1945
Santee .....	2,364	Orangeburg.....	Jan. 1942	June 1949
Sesqui-Centennial .....	1,500	Richland.....	Aug. 1937	June 1940
Table Rock.....	2,860	Pickens.....	May 1935	June 1940
46,138				



This flag, once flown over the White House, was presented to Andrew Jackson Historical State Park by Congressman James P. Richards (right). Shown accepting the flag are State Park Director C. West Jacocks (left) and Joe Croxton, Chairman of Lancaster County Historical Commission.



The Commission of Forestry also administers one wayside park and six historical areas:

Colleton Wayside, Colleton County  
 Eutaw Springs, Orangeburg County  
 Ft. Watson, Clarendon County  
 Thomas Sumter Burial Site, Sumter County

Burial places of:

Gen. Francis Marion, Berkeley County  
 Col. Isaac Hayne, Colleton County  
 Thomas Heyward, Jasper County

### HISTORICAL AREAS

The Division of State Parks is charged by the Legislature to maintain six historical areas within the State and receives a special appropriation for this purpose.

The Fort Watson memorial, an Indian mound in Clarendon County; the General Thomas Sumter burial area in Sumter County; and the Eutaw Springs historical site in Orangeburg County on Lake Marion; were deeded to the Forestry Commission and a definite program of maintenance is in operation.

The burial places of General Francis Marion at old Bell Isle Plantation in Berkeley County, of Col. Isaac Hayne in Colleton County, and of Thomas Heyward in Jasper County, are in private ownership and receive clean-up attention from the Commission.

This Division recommends that funds be made available to inaugurate a program of interpretation for the historical sites. Visitors to the areas do not comprehend the significance of the historical relics as there are no exhibits, displays or charts tending to depict the natural phenomena or historical advantages of the area.

The same program of interpretation should be operative at the several state parks and such recommendation is made to the Legislature.

## SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Out Door Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps †	Museum
Aiken Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x		
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x
BARNWELL Blackville, S. C. ....	x	x	x	x	x	x	x				x		x		x		
CHERAW Cheraw, S. C. .... { White Area. Negro Area.	x x	x x	x x	x x	x x	x x	x x	x x			x x		x x	x x	x x	x x	
CHESTER Chester, S. C. ....	x	x				x	x				x				x		
CROFT Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x		
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																	
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x		
GREENWOOD Ninety Six, S. C., RFD. { White Area. Negro Area.	x x	x x	x x	x x	x x	x x	x x	x x					x x		x x		
HUNTING ISLAND Frogmore, S. C. .... { White Area. Negro Area.	x x	x x		x x	x x		x x	x x				x x	x x		x x		
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x	
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x		
LITTLE PEE DEE Dillon, S. C. ....	x	x	x	x	x	x	x										
MYRTLE BEACH Myrtle Beach, S. C. ....	x	x		x	x		x	x		x	x		x		x		
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x		x		
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x	
PLEASANT RIDGE (For Negroes) Cleveland, S. C. ....	x	x		x	x	x	x	x					x				
POINSETT Wedgefield, S. C. .... { White Area. Negro Area.	x x	x x	x x	x x	x x	x x	x x	x x				x x	x x		x x	x x	
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x		x
SANTEE Elloree, S. C., RFD.....	x	x		x	x	x	x	x					x		x		
SESQUI-CENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x		
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x		

\* Where no regular barbecue pit and shelter are established, temporary arrangements can be made at all Parks.

† Two camps at each of Cheraw, Kings Mountain and Poinsett.

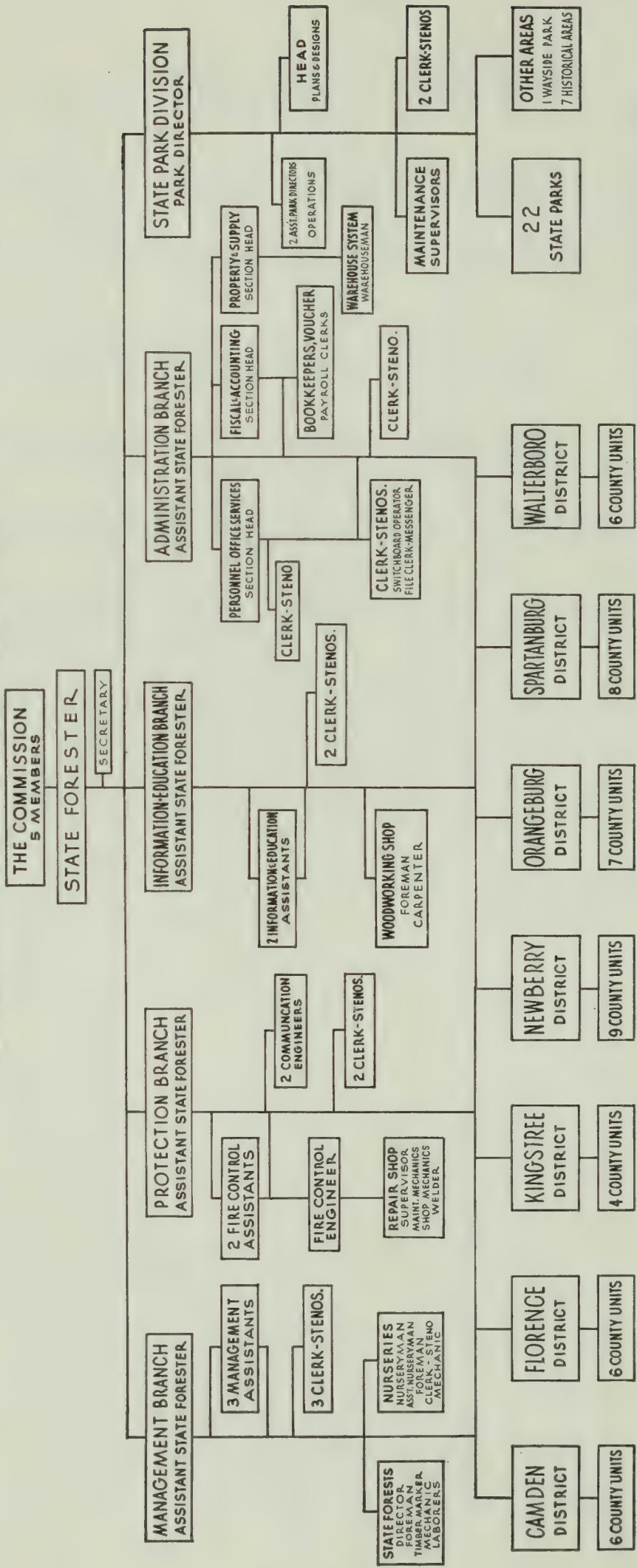
‡ Where no developed camping areas are established, temporary arrangements can be made at all parks.





# SOUTH CAROLINA STATE COMMISSION OF FORESTRY

## ORGANIZATION CHART



### STATE PARK ORGANIZATION

REGULAR  
SUPERINTENDENT  
RANGER  
FOREMAN  
LABORERS  
SEASONAL  
LIFE GUARDS

### COUNTY UNIT ORGANIZATION

COUNTY FORESTRY BOARD MEMBERS (5)  
RANGER  
DISPATCHER & TOWERMEN  
WARDENS  
MEDIUM SUPPRESSION UNIT OPERATORS  
FLEXIBLE CREWS

### DISTRICT OFFICE ORGANIZATION

DISTRICT FORESTER  
FORESTERS  
DISTRICT RANGER  
FORESTRY AIDES  
RADIO TECHNICIAN  
HEAVY SUPPRESSION UNIT OPERATOR-MECHANIC



## ADMINISTRATION

The Commission's Administrative Branch is responsible for coordinating the activities of both central and field offices on fiscal and accounting, property and supply, and personnel and office services for both Divisions of the Commission—Forestry and State Parks.

### Personnel Accident and Injury

During the year 63 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

### Automotive Accidents

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 11 accidents. Of the 11 accidents which occurred, only 3 were classified as being preventable by the operator. It is believed this outstanding safe driving record resulted from the continued emphasis placed on the careful operation of motor vehicles on Commission business, through specific training and the assistance of the National Safety Council.

The Commission instigated a safe driving program sponsored by the National Safety Council several years ago. One of the rules of the Council requests each driver to operate a vehicle on official business for twelve consecutive months without a preventable accident before entitled to the first year safe driving award. If a preventable accident occurs during the first three years or before the third year award has been received, the driver's safe driving record is canceled and he is requested to begin again. Should a preventable accident occur after the third year award is received, such driver is penalized and is requested to operate for twelve additional months from date of accident before entitled to the next year award.

A review of the Commission's employees safe driving records indicate that 119 of the 326 drivers have operated Commission or privately owned vehicles on official business for a period of one to five years without an accident; 94 for one to ten years; 73 for eleven to fifteen years; 40 for sixteen years and over.

### **Commission Purchasing**

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and fiscal procedure. A total of 1,682 requisitions were received and 1,562 purchase orders issued during the year.

Visual inventories were made during the year of all equipment in use by both the Division of Forestry and State Parks. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,550,966. In addition, the Commission has real property and improvements now estimated to be worth \$12,940,745.

### **Personnel**

Personnel employed by the Commission continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Ten percent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.



**PERSONNEL LOSSES****Division of Forestry****Resignations—1956-57**

Foresters .....	7
Technical .....	7
Clerk-Stenographers .....	6
District Ranger .....	1
Unit Rangers .....	2
Unit Wardens .....	8
Unit Towermen .....	10
Tractor Operators .....	10
Non-technical .....	37
Total resignations .....	44

**Losses Due to Promotions or Change in Positions**

Information and Education Assistant .....	1
District Foresters .....	2
Foresters .....	2
Technical .....	5
District Ranger .....	1
Assistant Nurseryman .....	1
Assistant Ranger .....	1
Unit Rangers .....	1
Wardens .....	1
Towermen .....	2
Tractor Operators .....	1
Non-technical .....	8
Total .....	13
Total Losses, Division of Forestry .....	57

Division of State Parks  
Resignations—1956-1957

Clerk-Stenographer .....	1
Rangers .....	5
Park Assistant, Fishing Pier.....	1
Laborers .....	5
	—
Total .....	12

Losses Due to Promotions or Change in Positions

Assistant Maintenance Mechanic.....	1
Rangers .....	1
Laborers .....	2
	—
	4
	—
Total Losses, Division of State Parks.....	16
	==
GRAND TOTAL—Personnel Losses.....	73

Training

The Commission of Forestry strives at all times to improve each and every activity through constant personnel training and supervision. A series of individual on-the-job training sessions were continued in each district office and proved highly successful and resulted in improved performance in all phases of administrative work. Subjects covered included budget preparation and fiscal control, property accountability, personnel records, leave, retirement and insurance, office administration and procedures.



## APPENDIX

## FINANCIAL STATEMENT

## SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1956 - June 30, 1957

## RECEIPTS

## Division of Forestry:

Balance from 1955-56—Radio Comm. Fund.....	\$ 5,339.75	
Balance from 1955-56—Federal Fund .....	4,554.21	
Balance from 1955-56—Manchester Forest Special .....	1,150.78	
State Appropriation—Operating .....	1,153,200.00	
State Appropriation—Manchester Special.....	4,500.00	
Coastal Nursery—Special.....	21,400.00	
Piedmont Nursery—Special 1-Loan.....	195,000.00	
Federal Funds—Protection C-M Law, Sec. 2.....	282,077.00	
Federal Funds—Reforestation C-M Law, Sec. 4 and N-D .....	1,000.00	
Federal Funds—Cooperative Farm Management....	23,630.03	
Federal Funds—12 Mile Creek (Pickens) Water- shed .....	19,547.47	
Federal Funds—Conservation Reserve Program .....	321,927.19	
Federal Funds—Civil Defense for Radio Equip- ment .....	1,158.59	
Federal Funds—Agricultural Stabilization .....	4,927.10	
Counties and Timber Firms.....	15,104.72	
Miscellaneous Receipts.....	122.39	
Nurseries .....	149,589.39	
State Forests.....	56,278.20	
Marking and Tallying Timber.....	5,543.92	
Radio Communication Project.....	3,490.48	
		<hr/>
Total Receipts—Forestry.....		\$2,269,541.22
Less Receipts Deposited to Cr. State Revenue Account .....		58,353.21
		<hr/>
Total Receipts Available for Expenditure.....		\$2,211,188.01
Total Expenditures .....		2,122,129.12
		<hr/>
Balance—Division of Forestry.....		\$ * 89,058.89

## Division of State Parks:

Balance from 1955-56—Hunting Island Deposits....	\$ 2,123.36
Balance from 1955-56—Myrtle Beach Fishing Pier .....	12,463.60
Balance from 1955-56—Greenwood Park.....	1,867.37
Balance from 1955-56—Parks Improvements.....	8,754.58
Balance from 1955-56—Parks Notes & Interest....	35,330.08

State Appropriation—Operating .....	326,600.00
State Appropriation—Historical Areas .....	3,274.00
State Appropriation—Hunting Island Beach Ero- sion .....	9,000.00
Forests and Parks Fund—Hunting Island Deposits .....	2,463.34
Myrtle Beach Fishing Pier .....	42,084.09
Fishing Pier Loan Repaid to Parks Improvement Fund .....	13,000.00
Cabin Rentals .....	25,064.43
Concession Stands .....	4,272.46
Bathhouse and Swimming .....	41,906.56
Boat Rentals .....	3,014.25
Picnic Shelters, Recreation Bldgs. and Trailer Camps .....	8,057.88
Group Camps .....	10,080.45
Miscellaneous .....	953.75
Hunting Island Grill .....	3,250.00

Total Receipts—Parks—Available for Expendi- ture .....	553,560.20
Total Park Expenditures .....	524,509.22
Balance—Division of State Parks .....	\$ † 29,050.98

### EXPENDITURES

Administrative and Technical .....	\$ 442,323.83
State Forest Nurseries .....	420,327.40
State Forest Projects .....	115,575.08
Fire Protection .....	995,096.16
Payments on Loan for New Nursery .....	148,806.65

Total—Division of Forestry .....	2,122,129.12
Total—Division of State Parks .....	524,509.22
Grand Total—Expenditures .....	\$2,646,638.34

### RECAPITULATION

#### Funds Available:

Division of Forestry .....	\$2,211,188.01
Division of State Parks .....	553,560.20

2,764,748.21

#### Expenditures:

Division of Forestry .....	\$2,122,129.12
Division of State Parks .....	524,509.22

2,646,638.34

Balance .....	\$ *† 118,109.87
---------------	------------------



\*Forestry :

Federal Fund—Advances for New Nursery.....	\$ 64,967.79
Coastal Nursery—Special.....	19,900.00
Radio Communications.....	3,408.36
Nursery Notes and Interest.....	782.74

†Parks :

Hunting Island Deposits.....	\$ 3,648.14
Parks Improvements.....	21,168.47
M. B. Fishing Pier.....	2,486.95
Park Notes and Interest.....	1,747.42
	<hr/>
	\$118,109.87

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1956-57

UNIT	Organized Personnel					Volunteer Personnel	Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville .....	1	2	..	1	4	90	94
Aiken .....	1	4	2	5	12	434	446
Allendale .....	1	2	1	3	7	105	112
Anderson .....	1	2	1	3	7	55	62
Bamberg .....	1	2	1	2	6	161	167
Barnwell .....	1	2	2	2	7	271	278
Beaufort .....	1	3	2	3	9	79	88
Berkeley .....	1	4	2	4	11	816	827
Calhoun .....	1	2	1	2	6	143	149
Charleston .....	1	4	2	3	10	377	387
Cherokee .....	1	1	..	1	3	438	441
Chester .....	1	3	1	1	6	62	68
Chesterfield .....	1	3	1	4	9	114	123
Clarendon .....	1	3	2	3	9	525	534
Colleton .....	1	4	2	5	12	792	804
Darlington .....	1	2	..	3	6	470	476
Dillon .....	1	2	1	2	6	255	261
Dorchester .....	1	4	2	3	10	295	305
Edgefield .....	1	2	..	1	4	108	112
Fairfield .....	1	4	1	3	9	196	205
Florence .....	1	4	2	4	11	556	567
Georgetown .....	1	4	2	4	11	464	475
Greenville .....	1	3	1	4	9	314	323
Greenwood .....	1	2	1	2	6	69	75
Hampton .....	1	3	1	3	8	347	355
Horry .....	1	5	2	4	12	800	812
Jasper .....	1	3	1	2	7	568	575
Kershaw .....	1	3	2	6	12	235	247
Lancaster .....	1	3	1	2	7	192	199
Laurens .....	1	3	1	2	7	160	167
Lee .....	1	2	1	3	7	250	257
Lexington .....	1	3	2	5	11	352	363
McCormick .....	1	1	1	1	4	84	88
Marion .....	1	3	2	3	9	153	162
Marlboro .....	1	3	1	3	8	211	219
Newberry .....	1	2	1	2	6	87	93
Oconee .....	1	2	..	3	6	151	157
Orangeburg .....	1	5	2	5	13	461	474
Pickens .....	1	3	..	4	8	72	80
Richland .....	1	5	1	4	11	325	336
Saluda .....	1	2	..	1	4	57	61
Spartanburg .....	1	3	1	4	9	114	123
Sumter .....	1	3	1	3	8	541	549
Union .....	1	2	..	1	4	116	120
Williamsburg .....	1	5	2	4	12	878	890
York .....	1	2	1	4	8	152	160
Totals.....	46	134	54	137	371	13,495	13,866



TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1956 - JUNE 30, 1957

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July .....	110	2.9	1,047.4	9.5
August .....	163	4.2	1,234.1	7.6
September .....	85	2.2	340.3	4.0
October .....	24	0.6	66.2	2.8
November .....	244	6.3	1,701.9	7.0
December .....	722	18.6	7,810.3	10.8
January .....	631	16.3	9,002.3	14.3
February .....	731	18.8	11,162.3	15.3
March .....	561	14.4	9,143.5	16.3
April .....	533	13.7	4,797.4	9.0
May .....	54	1.4	390.7	7.2
June .....	25	0.6	81.4	3.3
Totals.....	3,883	100.0	46,777.8	12.0

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Abbeville .....	1	7.2	1	18.0	..	..	5	34.7	1	0.8	1	2.8	2	22.2	3	73.4	14	159.1
Aiken .....	4	23.7	1	2.8	..	..	36	88.2	41	214.0	23	86.9	5	22.0	26	113.1	141	572.9
Allendale .....	..	...	3	3.4	1	0.1	13	49.6	18	59.1	16	144.4	..	...	7	74.5	58	331.1
Anderson .....	..	...	..	...	..	...	16	71.8	5	24.7	2	15.9	1	0.2	2	9.0	26	121.6
Bamberg .....	..	...	..	...	..	...	9	22.2	15	284.8	12	253.3	2	8.5	1	13.0	39	581.8
Barnwell .....	..	...	..	...	..	...	29	190.2	31	237.7	30	284.6	1	5.4	1	3.2	92	721.1
Beaufort .....	1	0.1	..	...	1	8.0	4	44.0	15	158.6	29	158.4	2	19.0	11	52.9	63	441.0
Berkeley .....	..	...	1	15.0	4	35.0	30	340.0	13	58.2	214	3,327.5	1	6.0	4	15.0	267	3,796.7
Calhoun .....	1	2.4	..	...	..	...	15	38.5	2	7.6	6	71.7	..	...	2	1.1	26	121.3
Charleston .....	2	8.5	2	30.0	4	84.2	44	514.4	22	1,670.6	33	519.5	4	11.3	6	37.2	117	2,875.7
Cherokee .....	..	...	9	31.4	..	...	6	12.5	1	2.0	16	114.6	3	5.5	1	7.0	36	173.0
Chester .....	..	...	3	32.7	..	...	5	10.3	6	4.7	..	...	1	61.0	8	16.0	23	124.7
Chesterfield .....	12	156.3	..	...	2	5.4	6	22.7	7	24.4	27	103.1	3	7.0	3	8.2	60	327.1
Clarendon .....	..	...	..	...	..	...	43	692.5	45	540.2	94	1,446.8	3	41.1	12	190.0	217	3,360.4
Colleton .....	6	21.6	3	5.5	5	21.6	59	353.7	66	550.3	57	796.8	1	1.5	14	63.8	211	1,814.8
Darlington .....	1	12.0	..	...	4	50.4	45	308.1	25	134.9	7	208.2	2	53.6	8	30.1	92	797.3
Dillon .....	..	...	..	...	3	24.2	23	284.3	27	147.9	3	5.5	1	8.0	2	6.5	59	476.4
Dorchester .....	..	...	1	3.0	3	79.0	40	612.0	38	623.1	21	472.0	4	149.0	4	12.0	111	1,950.1
Edgefield .....	4	60.0	..	...	..	...	10	107.2	2	56.6	..	...	2	2.2	1	8.9	19	234.9
Fairfield .....	2	6.5	9	97.0	1	2.0	14	51.2	3	6.4	84	1,930.5	6	29.9	3	20.0	38	213.0
Florence .....	..	...	..	...	1	89.0	45	268.4	64	482.9	..	...	3	95.5	7	24.0	204	2,890.3
Georgetown .....	2	87.0	2	7.6	..	...	57	507.6	16	146.0	18	66.6	2	49.2	16	77.7	113	941.7
Greenville .....	3	1.0	3	3.3	6	8.6	31	43.1	17	11.1	6	11.5	1	2.4	8	3.8	75	84.8
Greenwood .....	..	...	1	30.6	..	...	5	7.9	2	4.8	..	0.8	..	...	1	10.0	10	54.1
Hampton .....	3	4.3	..	...	2	2.5	19	74.2	25	140.5	28	1,955.9	..	...	7	48.6	84	2,226.0
Horry .....	2	0.6	1	9.0	8	122.1	57	741.9	71	1,651.8	123	2,614.4	7	166.8	22	199.0	291	5,505.6
Jasper .....	7	42.7	1	0.6	4	13.0	20	211.9	32	784.1	65	1,739.2	..	...	12	249.1	141	3,020.6
Kershaw .....	3	51.0	1	0.5	6	21.0	11	58.3	14	83.0	17	162.9	2	0.7	4	22.8	58	400.2
Lancaster .....	..	...	1	5.3	..	...	7	62.7	5	6.4	11	25.1	1	0.5	5	18.5	30	118.5
Laurens .....	..	...	3	15.6	2	7.1	11	47.6	4	19.0	6	36.1	2	6.2	2	18.0	30	419.6
Lee .....	..	...	..	...	3	73.5	28	173.8	20	128.9	23	453.2	5	7.9	3	15.5	82	852.8
Lexington .....	4	9.8	1	...	1	4.0	28	96.2	17	41.3	6	45.2	2	16.0	8	9.7	67	223.2
Marion .....	1	4.2	..	...	..	...	5	9.7	7	40.0	13	60.4	..	...	4	5.5	30	119.8
Marlboro .....	1	13.0	..	...	1	7.7	6	69.9	16	343.2	62	657.6	2	21.2	2	6.0	90	1,118.6
McCormick .....	..	...	6	101.2	..	...	10	89.5	1	20.0	1	1.3	3	9.3	..	...	21	221.3
Newberry .....	1	2.0	1	0.8	..	...	3	21.4	2	2.5	..	...	3	2.2	4	4.6	14	33.5
Oconee .....	..	...	10	6.0	1	0.6	5	7.7	10	24.0	1	1.5	1	0.8	13	71.0	41	112.5
Orangeburg .....	3	68.5	2	7.1	4	115.4	72	808.0	21	304.1	115	2,428.6	3	16.2	1	27.0	221	3,774.9
Pickens .....	1	0.3	..	...	..	...	8	21.1	4	3.8	..	...	..	...	6	15.1	19	40.3
Richland .....	2	19.0	10	143.5	4	13.4	40	448.4	28	99.0	40	377.2	1	0.6	17	70.7	142	1,171.8
Saluda .....	..	...	..	...	1	2.1	7	13.0	2	1.6	1	4.1	2	2.9	1	1.0	14	24.7
Spartanburg .....	..	...	5	17.5	..	...	16	69.6	4	35.5	1	8.0	..	...	5	28.0	31	158.6
Sumter .....	..	...	1	3.2	2	131.0	37	272.9	31	361.3	45	398.3	2	33.5	15	89.4	133	1,289.6
Union .....	..	...	6	18.5	..	...	4	12.5	3	20.0	10	25.5	1	3.0	8	20.0	32	99.5
Williamsburg .....	..	...	..	...	4	58.1	14	80.0	47	993.1	101	1,609.3	5	43.6	2	35.1	173	2,819.2
York .....	1	0.1	1	9.7	..	...	11	35.0	6	55.5	..	...	..	...	9	31.8	28	132.1
Total.....	68	601.8	89	620.7	103	1,451.0	1,009	8,100.4	852	10,590.0	1,369	22,625.2	92	931.9	301	1,856.8	3,883	46,777.8



TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1956-57

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL NO.
Abbeville .....	....	9	5	....	....	14
Aiken .....	13	114	14	....	....	141
Allendale .....	6	47	5	....	....	58
Anderson .....	3	19	4	....	....	26
Bamberg .....	2	27	8	2	....	39
Barnwell .....	1	77	14	....	....	92
Beaufort .....	3	45	15	....	....	63
Berkeley .....	24	171	68	3	1	267
Calhoun .....	1	23	2	....	....	26
Charleston .....	9	81	25	1	1	117
Cherokee .....	9	21	6	....	....	36
Chester .....	3	17	3	....	....	23
Chesterfield .....	10	46	4	....	....	60
Clarendon .....	15	128	70	4	....	217
Colleton .....	19	152	39	1	....	211
Darlington .....	6	68	17	1	....	92
Dillon .....	13	39	6	1	....	59
Dorchester .....	1	59	48	3	....	111
Edgefield .....	1	10	8	....	....	19
Fairfield .....	....	32	6	....	....	38
Florence .....	16	148	36	4	....	204
Georgetown .....	14	80	18	1	....	113
Greenville .....	23	51	1	....	....	75
Greenwood .....	....	9	1	....	....	10
Hampton .....	5	69	9	1	....	84
Horry .....	15	153	114	9	....	291
Jasper .....	12	79	41	9	....	141
Kershaw .....	5	42	11	....	....	58
Lancaster .....	3	23	4	....	....	30
Laurens .....	....	25	5	....	....	30
Lee .....	2	64	15	1	....	82
Lexington .....	12	50	5	....	....	67
Marion .....	2	26	2	....	....	30
Marlboro .....	13	53	22	2	....	90
McCormick .....	3	13	5	....	....	21
Newberry .....	2	11	1	....	....	14
Oconee .....	8	33	....	....	....	41
Orangeburg .....	....	130	89	2	....	221
Pickens .....	4	15	....	....	....	19
Richland .....	14	107	19	2	....	142
Saluda .....	4	10	....	....	....	14
Spartanburg .....	....	28	3	....	....	31
Sumter .....	17	91	23	2	....	133
Union .....	....	31	1	....	....	32
York .....	5	21	2	....	....	28
Totals.....	364	2625	838	54	2	3883

TABLE 5—SUMMARY OF FIRES BY COUNTIES AND MONTHS—FISCAL YEAR 1935-36

UNIT	July 1956		Aug. 1956		Sept 1956		Oct. 1956		Nov. 1956		Dec. 1956		Jan. 1957		Feb. 1957		March 1957		April 1957		May 1957		June 1957	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Abbeville	..	..	3	81.6	1	0.8	1	2.8	3	31.1	..	..	11	0.6	..	..	3	23.6	2	18.6	..	..	..	..
Aiken	4	23.4	11	48.5	4	6.2	2	5.8	14	50.0	22	51.3	13	70.6	21	135.2	23	106.3	21	63.8	5	10.8	1	1.6
Allendale	..	..	5	14.9	4	3.3	..	..	7	20.5	4	58.2	12	52.5	10	116.2	7	24.5	7	23.0	..	..	2	18.0
Anderson	..	..	4	19.5	2	6.2	1	..	..	..	..	..	1	0.3	5	32.3	..	..	4	6.3	..	..	1	0.1
Bamberg	..	..	3	83.5	..	..	..	..	1	1.0	8	83.0	7	56.0	10	150.0	8	203.8	1	3.0	..	..	1	1.5
Barwell	..	..	5	151.4	1	2.4	..	..	5	13.5	22	122.5	15	103.3	26	202.6	13	64.2	5	61.2	..	..	..	..
Beaufort	1	0.1	1	1.8	1	1.0	..	..	2	3.7	9	47.9	19	160.5	16	120.5	16	56.0	8	49.5	..	..	..	..
Berkeley	2	2.0	3	8.5	..	..	..	..	14	71.5	49	475.0	34	1,337.4	61	749.7	58	886.8	43	262.1	3	3.7	..	..
Calhoun	1	1.0	..	..	..	2.4	..	..	3	1.4	6	23.4	2	48.9	5	22.8	3	10.7	5	10.7	..	..	..	..
Charleston	2	2.6	5	144.5	1	2.1	..	..	9	88.6	12	83.5	25	325.0	12	1,542.9	22	419.3	26	264.4	1	2.0	2	0.8
Cherokee	..	..	17	39.8	..	..	..	..	1	14.4	4	41.2	5	7.0	1	3.0	2	6.5	6	61.1	..	..	..	..
Chester	2	1.2	2	61.2	3	16.7	..	..	1	0.5	4	4.2	2	15.8	3	5.1	1	0.1	2	8.0	1	1.0	2	10.9
Chesterfield	7	131.0	7	27.6	1	0.2	..	..	6	5.7	5	22.9	3	0.3	6	17.4	10	51.0	14	67.8	1	3.2	..	..
Clarendon	1	0.3	1	0.1	..	..	..	..	7	20.7	40	719.4	53	912.8	51	886.9	35	530.8	26	270.4	3	19.0	..	..
Colleton	4	21.5	6	16.1	1	1.0	..	..	9	69.7	40	262.2	32	416.2	68	464.8	24	328.4	26	234.8	1	0.1	..	..
Darlington	4	14.3	3	3.1	..	..	..	..	9	27.4	21	152.6	17	57.5	11	114.8	11	273.7	14	135.9	1	8.0	1	10.0
Dillon	2	0.6	2	0.6	2	1.1	1	0.1	5	34.2	8	7.0	10	158.3	11	131.7	6	6.5	11	134.3	1	2.0	..	..
Dorchester	..	..	..	..	..	..	..	..	9	278.6	21	362.5	18	209.0	25	477.5	17	286.0	21	336.5	..	..	..	..
Edgefield	2	40.1	6	64.1	2	19.6	..	..	2	6.9	..	..	4	38.7	2	9.5	1	56.0	..	..	..	..	..	..
Fairfield	3	38.5	4	15.5	2	9.0	..	..	5	25.4	7	33.0	..	..	5	45.0	6	34.4	5	10.7	1	1.5	..	..
Florence	2	24.2	3	70.8	2	25.6	2	3.0	8	26.6	49	548.4	48	500.4	46	1,072.6	23	328.4	17	288.1	1	0.8	3	1.4
Georgetown	3	88.7	..	..	1	45.0	..	..	2	1.1	29	146.7	17	132.0	17	222.1	18	166.8	24	134.2	2	5.1	..	..
Greenville	6	2.2	4	1.9	4	3.8	..	..	7	5.0	15	10.2	9	8.5	4	7.6	11	36.6	13	8.3	2	0.7	..	..
Greenwood	2	31.4	2	4.6	1	3.6	..	..	..	..	2	2.3	1	10.0	1	1.0	..	..	1	1.2	..	..	..	..
Hampton	3	7.2	6	14.0	1	2.0	..	..	7	15.2	15	128.8	17	52.4	10	68.5	20	1,926.5	5	11.4	..	..	..	..
Horry	2	1.1	2	1.1	1	33.9	3	..	7	19.7	78	2,105.2	46	605.3	48	1,115.0	43	688.1	40	680.8	8	216.0	7	16.9
Jasper	7	29.3	4	65.8	2	12.1	..	..	3	31.5	17	272.2	23	598.6	40	793.8	32	788.4	13	428.9	..	..	..	..
Kershaw	3	50.5	1	0.2	5	18.3	2	..	5	19.4	13	87.1	7	30.7	11	120.5	1	2.0	8	64.0	2	2.4	..	..
Lancaster	2	0.7	6	12.6	3	14.7	..	..	..	..	3	26.6	6	35.5	1	11.0	1	1.3	8	16.1	..	..	..	..
Laurens	3	33.4	7	32.3	2	11.0	..	..	..	..	4	5.2	3	22.5	5	26.2	5	17.2	1	1.8	..	..	..	..
Lee	3	7.0	..	..	..	..	..	..	3	6.0	16	180.5	13	151.3	19	111.2	11	310.9	15	83.2	2	2.7	..	..
Lexington	11	57.0	6	5.0	5	18.7	..	..	11	19.3	6	40.4	6	13.3	10	31.7	5	28.0	4	7.0	3	2.8	1	4.2
Marion	..	..	1	0.8	..	..	..	..	1	0.3	5	6.5	5	45.5	6	18.8	5	16.8	6	26.9	..	..	..	..
Marlboro	6	41.7	1	13.0	..	..	..	..	3	86.7	13	56.6	11	141.5	17	388.6	16	141.0	23	249.5	..	..	..	..
McComick	1	16.0	5	103.7	1	3.0	..	..	3	19.4	2	40.2	1	0.3	3	3.2	..	..	5	35.5	..	..	..	..
Newberry	3	4.1	2	4.4	2	0.6	..	..	3	11.2	7	12.0	..	..	..	..	..	..	..	..	..	..	..	..
Oconee	..	..	2	..	2	0.3	3	1.5	3	4.1	7	56.5	..	..	..	..	..	..	..	..	..	..	..	..
Orangeburg	2	93.5	6	85.2	4	35.6	4	16.4	14	189.9	40	487.5	43	1,064.9	53	1,126.1	32	489.1	20	164.6	2	6.8	1	10.0
Pickens	..	..	1	0.3	1	2.0	1	0.1	3	5.3	8	24.5	..	..	1	0.5	3	2.6	1	5.0	..	..	..	..
Richland	8	232.5	7	10.9	6	9.1	2	3.0	20	154.3	22	152.0	13	207.0	25	225.6	14	90.6	18	68.5	6	13.7	1	4.6
Saluda	1	3.5	..	..	2	4.3	1	1.2	4	10.6	1	0.2	..	..	4	3.9	..	..	1	1.0	..	..	..	..
Spartanburg	1	16.0	3	8.0	2	7.0	1	1.5	3	8.0	9	79.5	2	10.1	..	..	4	13.0	4	14.0	..	..	..	..
Sumter	4	5.8	..	..	2	10.1	..	..	8	223.3	33	225.3	27	431.7	20	88.1	14	117.2	25	188.1	2	1.5	..	..
Union	1	2.0	..	..	3	7.5	..	..	..	..	4	17.0	1	0.5	3	7.0	6	17.5	10	39.5	..	..	..	..
Williamsburg	..	..	1	8.5	..	..	..	..	..	..	38	497.2	47	929.8	30	471.3	27	528.6	14	236.2	2	73.0	1	1.0
York	1	23.0	3	6.7	1	0.1	..	..	1	0.1	5	12.7	5	30.5	3	12.6	4	30.7	4	14.7	1	1.0	..	..
Totals.....	110	1,047.4	163	1,234.1	85	340.3	24	66.2	244	1,701.9	722	7,810.3	631	9,002.3	731	11,162.3	561	9,143.5	533	4,797.4	54	390.	25	81.4



TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1956-57

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning .....	68	1.7	601.8	8.9
Railroads .....	89	2.3	620.7	7.0
Campers .....	103	2.7	1,451.0	14.1
Smokers .....	1,009	26.0	8,100.4	8.0
Debris Burning.....	852	21.9	10,590.0	12.4
Incendiary .....	1,369	35.3	22,625.2	16.5
Lumbering .....	92	2.4	931.9	10.1
Miscellaneous .....	301	7.7	1,856.8	6.2
Totals.....	3,883	100.0	46,777.8	12.0

TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD  
(Percent of Total)

CAUSES	1952-53	1953-54	1954-55	1955-56	1956-57	Average For 5-Year Period
Lightning .....	1.6	0.6	2.4	1.1	1.7	1.5
Railroads .....	1.3	1.7	2.7	1.6	2.3	1.9
Campers .....	2.8	2.4	2.6	2.6	2.7	2.6
Smokers .....	24.6	25.6	26.1	23.8	26.0	25.2
Debris Burning.....	19.6	20.9	19.3	22.1	21.9	20.8
Incendiary .....	38.6	41.0	37.0	39.4	35.3	38.3
Lumbering .....	1.9	2.5	3.4	2.5	2.4	2.5
Miscellaneous .....	9.6	5.3	6.5	6.9	7.7	7.2

TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1956-57

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville .....	167,826	14	159.1	.09	11.4
Aiken .....	450,200	141	572.9	.13	4.1
Allendale .....	131,400	58	331.1	.25	5.7
Anderson .....	173,700	26	121.6	.07	4.7
Bamberg .....	126,000	39	581.8	.46	14.9
Barnwell .....	147,800	92	721.1	.49	7.8
Beaufort .....	188,400	63	441.0	.24	7.0
Berkeley .....	398,974	267	3,796.7	.95	14.2
Calhoun .....	123,500	26	121.3	.10	4.7
Charleston .....	271,994	117	2,875.7	1.06	24.8
Cherokee .....	127,800	36	173.0	.14	4.8
Chester .....	260,023	23	124.7	.05	5.4
Chesterfield .....	310,000	60	327.1	.11	5.5
Clarendon .....	228,500	217	3,360.4	1.47	15.5
Colleton .....	465,000	211	1,814.8	.39	8.6
Darlington .....	208,500	92	797.3	.38	8.7
Dillon .....	144,100	59	476.4	.33	8.1
Dorchester .....	268,200	111	1,950.1	.73	17.6
Edgefield .....	172,641	19	234.9	.14	12.4
Fairfield .....	338,957	38	213.0	.06	5.6
Florence .....	293,900	204	2,890.3	.98	14.2
Georgetown .....	415,600	113	941.7	.23	8.3
Greenville .....	267,800	75	84.8	.03	1.1
Greenwood .....	198,913	10	54.1	.03	5.4
Hampton .....	239,500	84	2,226.0	.93	26.5
Horry .....	557,600	291	5,505.6	.99	18.9
Jasper .....	280,000	141	3,020.6	1.08	21.4
Kershaw .....	336,500	58	400.2	.12	6.9
Lancaster .....	199,400	30	118.5	.06	4.0
Laurens .....	244,735	30	149.6	.06	5.0
Lee .....	110,600	82	852.8	.77	10.4
Lexington .....	291,500	67	223.2	.08	3.3
Marion .....	224,700	30	119.8	.05	4.0
Marlboro .....	150,600	90	1,118.6	.74	12.4
McCormick .....	144,840	21	221.3	.15	10.5
Newberry .....	205,003	14	33.5	.02	2.4
Oconee .....	259,252	41	112.5	.04	2.7
Orangeburg .....	318,800	221	3,774.9	1.18	17.1
Pickens .....	190,100	19	40.3	.02	2.1
Richland .....	289,500	142	1,171.8	.40	8.3
Saluda .....	149,956	14	24.7	.02	1.8
Spartanburg .....	208,300	31	158.6	.08	5.1
Sumter .....	205,400	133	1,289.6	.63	9.7
Union .....	157,894	32	99.5	.06	3.1
Williamsburg .....	429,800	173	2,819.2	.66	16.3
York .....	226,300	28	132.1	.06	4.7
Totals.....	11,300,008	3,883	46,777.8	.41	12.0



TABLE 9—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1952-53 .....	11,300,008	4,928	78,193.8	0.69	15.9
1953-54 .....	11,300,008	6,532	119,142.2	1.05	18.2
1954-55 .....	11,300,008	7,022	158,785.5	1.41	22.6
1955-56 .....	11,300,008	4,506	76,743.5	0.68	17.0
1956-57 .....	11,300,008	3,883	46,777.8	0.41	12.0
5-Year Average.....	11,300,008	5,374	95,928.6	0.85	17.9

TABLE 10—1956-57 SEEDLING DISTRIBUTION BY LANDOWNERSHIP CLASSIFICATION\*

Land Ownership	Loblolly	Slash	Longleaf	Arizona Cypress	Red Cedar	Total
Farms .....	4,701,200	*15,654,450	248,550	155,300	500	20,760,000
Association and Clubs.....	46,200	43,700	.....	.....	.....	89,900
Schools .....	21,500	66,200	1,200	700	.....	89,600
State Forests.....	.....	525,000	50,000	.....	4,000	579,000
Other State Lands.....	31,000	878,700	5,000	6,500	4,000	925,200
Other Public Lands.....	7,000	42,500	.....	2,000	.....	51,500
Other Individuals.....	1,118,250	8,847,250	129,350	85,400	.....	10,180,250
Forest Industries.....	*10,062,000	*15,099,500	52,000	8,200	2,000	25,223,700
Other Industrials.....	591,000	793,000	15,000	12,000	.....	1,411,000
Federal Lands.....	168,000	*8,154,123	*1,656,013	.....	.....	9,978,136
Totals.....	16,746,150	50,104,423	2,157,113	270,100	10,500	69,288,286
S. C. Stock Shipped.....	.....	.....	50	400	.....	450
S. C. Stock Totals.....	16,426,150	38,171,800	504,650	270,500	10,500	55,383,600
Out-of-State Stock.....	320,000	11,932,623	1,652,513	.....	.....	13,905,136

\*Includes Out-of-State Stock brought in by the following:

Atomic Energy Commission; Gair Woodlands Corp.; Union Bag—Camp Paper Company.

TABLE 11—S. C. STATE COMMISSION OF FORESTRY\* 1956-57 SEEDLING DISTRIBUTION BY COUNTY, SPECIES AND AMOUNT

County	Loblolly	Slash	Longleaf	Arizona Cypress	Red Cedar	Total
Abbeville .....	1,020,500	116,000	5,000	4,000	.....	1,145,500
Aiken† .....	14,500	11,480,323	1,695,013	31,750	.....	13,221,586
Allendale† .....	.....	2,898,000	3,000	7,500	.....	2,908,500
Anderson .....	744,000	135,000	1,500	3,500	.....	884,000
Bamberg† .....	39,750	943,750	1,250	1,000	.....	985,750
Barnwell .....	.....	1,002,000	.....	6,000	.....	1,008,000
Beaufort .....	.....	690,500	16,000	8,000	.....	714,500
Berkeley .....	996,000	2,009,750	15,250	2,500	.....	3,023,500
Calhoun .....	12,000	576,000	10,000	6,000	.....	604,000
Charleston .....	23,000	515,700	1,000	3,000	.....	542,700
Cherokee† .....	352,500	1,500	.....	2,500	.....	356,500
Chester .....	594,700	70,000	1,000	.....	.....	665,700
Chesterfield .....	107,500	1,622,500	82,600	500	.....	1,813,100
Clarendon .....	16,500	1,041,000	31,500	2,500	.....	1,091,500
Colleton† .....	1,147,000	2,325,000	1,000	17,000	.....	3,490,000
Darlington .....	19,500	375,000	6,500	5,000	.....	406,000
Dillon .....	20,500	162,500	16,500	4,000	.....	203,500
Dorchester .....	2,352,000	810,500	6,000	7,000	.....	3,175,500
Edgefield .....	112,000	342,320	.....	.....	.....	454,320
Fairfield .....	350,500	559,720	2,000	6,000	.....	918,220
Florence .....	10,000	278,500	16,000	1,750	.....	306,250
Georgetown .....	606,000	861,500	2,000	6,500	500	1,476,500
Greenville .....	303,200	10,000	4,000	16,500	.....	333,700
Greenwood .....	602,920	295,000	2,000	12,000	.....	911,920
Hampton† .....	50,000	4,117,000	8,500	7,200	.....	4,182,700
Horry .....	266,500	1,383,500	3,000	500	2,000	1,655,500
Jasper† .....	187,000	3,314,000	1,000	8,000	.....	3,510,000
Kershaw .....	161,500	2,930,500	69,000	3,200	.....	3,164,200
Lancaster .....	388,000	179,500	2,000	6,000	.....	575,500
Lauren† .....	1,512,400	263,100	1,000	.....	.....	1,776,500
Lee .....	4,700	320,000	8,500	2,000	.....	335,200
Lexington .....	15,000	1,067,500	33,500	7,000	.....	1,123,000
Marion .....	73,000	463,000	4,000	7,000	.....	547,000
Marlboro .....	40,000	833,500	20,000	3,500	.....	897,000
McCormick .....	148,500	137,000	2,000	500	.....	288,000
Newberry .....	173,400	1,096,360	1,000	3,000	.....	1,273,760
Oconee .....	409,500	.....	5,500	3,000	.....	418,000
Orangeburg .....	139,000	1,648,200	33,800	16,650	.....	1,837,650
Pickens .....	870,000	.....	.....	3,500	.....	873,500
Richland .....	296,000	1,891,500	14,500	14,850	4,000	2,220,850
Saluda .....	79,580	11,000	1,000	.....	.....	91,580
Spartanburg† .....	823,500	57,000	12,000	14,000	.....	906,500
Sumter .....	22,000	868,500	7,000	5,000	4,000	906,500
Union .....	291,500	64,500	500	2,000	.....	358,500
Williamsburg .....	159,000	280,500	.....	2,000	.....	441,500
York .....	1,191,500	56,200	10,200	6,700	.....	1,264,600
Total Plantings.....	16,746,150	50,104,423	2,157,113	270,100	10,500	69,288,286

\*Includes the following Out-of-State Stock: 320,000 Loblolly, 11,932,623 Slash, and 1,652,513 Longleaf.

†Counties in which Out-of-State Stock was planted.

S. C. Stock shipped out-of-state: 50 Longleaf and 400 Arizona Cypress.

Total S. C. Stock.....16,426,150    38,171,800    504,650    270,500    10,500    55,383,600



TABLE 12—ACCUMULATED TREES PLANTED RECORD AND PLANTING NEEDS

County	Seedlings Planted 1929-1956	Seedlings Planted 1956-1957	Grand Total Planted To Date	Acres Planted Through June 30, 1957	Acres Needing Planting as of June 30, 1957
Abbeville .....	7,549,188	1,145,500	8,694,688	8,695	4,490
Aiken* .....	56,865,607	13,221,586	70,087,193	70,087	94,522
Allendale .....	11,009,395	2,908,500	13,917,895	13,918	15,132
Anderson .....	9,510,447	884,000	10,394,447	10,394	13,620
Bamberg .....	2,070,200	985,750	3,055,950	3,056	18,716
Barnwell .....	12,115,425	1,008,000	13,123,425	13,123	22,727
Beaufort .....	2,475,245	714,500	3,189,745	3,190	43,118
Berkeley .....	13,247,035	3,023,500	16,270,535	16,271	40,614
Calhoun .....	3,013,350	604,000	3,617,350	3,617	2,867
Charleston .....	2,748,540	542,700	3,291,240	3,291	50,773
Cherokee .....	4,447,529	356,500	4,804,029	4,804	14,870
Chester .....	9,383,200	665,700	10,048,900	10,049	29,331
Chesterfield .....	14,043,150	1,813,100	15,856,250	15,856	126,618
Clarendon .....	6,035,915	1,091,500	7,127,415	7,127	20,761
Colleton .....	8,834,380	3,490,000	12,324,380	12,324	17,608
Darlington .....	3,713,820	406,000	4,119,820	4,120	11,091
Dillon .....	2,403,255	203,500	2,606,755	2,607	12,976
Dorchester .....	7,351,680	3,175,500	10,527,180	10,527	22,502
Edgefield .....	4,975,518	454,320	5,429,838	5,430	5,861
Fairfield .....	7,391,459	918,220	8,309,679	8,310	15,645
Florence .....	2,453,718	306,250	2,759,968	2,760	25,209
Georgetown .....	7,137,800	1,476,500	8,614,300	8,614	28,572
Greenville .....	4,243,179	333,700	4,576,879	4,577	24,078
Greenwood .....	8,528,202	911,920	9,440,122	9,440	11,916
Hampton .....	8,983,715	4,182,700	13,166,415	13,166	10,392
Horry .....	6,931,700	1,655,500	8,587,200	8,587	46,578
Jasper .....	10,738,210	3,510,000	14,248,210	14,248	18,510
Kershaw .....	27,858,537	3,164,200	31,022,737	31,023	87,884
Lancaster .....	9,154,393	575,500	9,729,893	9,730	33,445
Laurens .....	9,256,490	1,776,500	11,032,990	11,033	15,066
Lee .....	1,943,355	335,200	2,278,555	2,279	29,448
Lexington .....	6,548,790	1,123,000	7,671,790	7,672	80,214
McCormick .....	2,791,125	288,000	3,079,125	3,079	14,096
Marion .....	2,432,795	547,000	2,979,795	2,980	18,281
Marlboro .....	6,450,030	897,000	7,347,030	7,347	20,558
Newberry .....	8,853,763	1,273,760	10,127,523	10,128	6,976
Oconee .....	4,569,035	418,000	4,987,035	4,987	12,328
Orangeburg .....	7,913,450	1,837,650	9,751,100	9,751	11,894
Pickens .....	5,235,355	873,500	6,108,855	6,109	4,398
Richland .....	8,943,578	2,220,850	11,164,428	11,164	88,137
Saluda .....	2,838,541	91,580	2,930,121	2,930	12,209
Spartanburg .....	8,672,799	906,500	9,579,299	9,579	27,650
Sumter .....	18,946,965	906,500	19,853,465	19,853	9,850
Union .....	9,733,199	558,500	10,091,699	10,092	23,019
Williamsburg .....	4,151,565	441,500	4,593,065	4,593	35,736
York .....	8,518,606	1,264,600	9,783,206	9,783	31,454
Totals.....	393,013,233	69,288,286	462,301,519	462,300	1,311,740

\*Includes planting on AEC property (1952-53 1st year).

















S. C. STATE COMMISSION OF FORESTRY



